1

Jim Thomson 1 July 1974

phone 484-6153

140 Erskine Ave
Apt # 1410
Toronto

3

Dome Temp. .....

Focus .....

Dome Temp. .....

our Angle End	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								DAVID DUNLAP OBSERVATORY	
								74" LOGBOOK	
								PLATE NOS. 37616–38614	
								OCTOBER 1973–Aug 1974	
								VOL 46	

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B baked Oct 22

(continuation)

Date 1973 Oct 23 Tues **Observer** Hu-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
37616	HD 28475	04 24.2	+10 18	G12	IIaOB	13/.5		01:17	01:46	C
37617	HD 21364	03 21.8	+09 23	"	IIIaJ	9/.7		01:53	02:14	A
37617T1	cal steps wedge for plate	37617			IIIaJ	10 min				
37617F1	focus test out [illegible]				IIaOB	9	50°F			B

Dome Temp. 48°F 98%

Transparency Conditions excellent, some haze

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00454 E	+10° 31'	1-2"	6.55	B9	12-12-12 no filter	Hd Sp Bin	200/75		Fine
0438W	+090 45'	"	3.66	B8p	3-3-3	Bin Sp Bin	20/70	2 Tau	Fine
								Dev 9mm @ 68°F MW P2	
					5/5 no filter			closed up too humid + fog	ok

7 #1

b 0a922
x evacuated

Date 1973 Oct 23/24 Tues-Wed **Observer** Hu-Ri **Julian Day**

Plate No. ✓	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37618	HD 142926	15h 59.6 52.1	+42° 51	G-12	IIaOb	13/.9	57°F	18:07	18:27	A
37619	"	"	"	"	"	"		18:28	18:43	B
37620	HD 186 547	19h 39.9	+13° 04'	G-12	IIaOb	13/.5		18:47	19:00	C
37621	HD 190658	20h 00.9	+15° 13'	G-12	IIaOb	13/.5		19:04	19:50	A
37622	HD 216 494	22h 48.2	-12° 09	G-12	IIaOb	13/.5		19:55	20:13	B
37623	HD 214946	22h 36.7	+44° 29	G-12	IIaOb	13/.5		20:18	20:41	C
37624	HD 225093	23h 58.3	+72° 36'	G-12	IIaOb	13/.5		20:45	21:06	A
37625	HD 21364	03h 21.8	+09° 23'	G-12	IIIaJ*	9/.7		21:11	21:36	B
37626	HD 24760	03h 51.1	+39° 43'	G-12	IIIaJ*	9/.7		21:40	21:48	C
37627	HD 11291	01h 45.8	+50 18'	G-12	IIaOb	13/.5		21:52	21:58	A
37628	HD 15472	02h 24.4	+70° 30	G-12	IIaOb	13/.5		22:04	22:35	B
37628T1	cal step wedge for plates 37618-24, 27-29, 32-33				IIaOb	1 sec				
37628T2	cal step wedge for plates 37625-26, 30-31				IIIaJ	10 min.				
37629	HD 16066	02 29.8	+67 38	G-12	IIaOb	13/.5		22:38	23:14	C
37630	HD 24760	03 51.1	+39 43	"	IIIaJ	9/.7		23:18	23:24	A
37631	HD 21364	03 21.8	+09 23	"	"	"	57°F	23:28	23:46	B

Dome Temp. 60°F @ 65%

Focus 30 R

Dome Temp. .....

Transparency Conditions Excellent

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
A	04h25W	+42° 43'	3-4	5.6	Bc	12-12-12	Hd Sp Bin	200/140	4 Her	Fair
B	04h41W	"	"	"	"	12-12-12	"	200/140	4 Her	Fair
C	01h09W	+13° 16'	2-3	6.1	B8 III	12-12-12	"	400/140		Fair
A	01h37W	+15° 31		6.34	M2 III	12-12-12	"	400/300		Poor
B	00h47E	-11° 40'		5.9	B9 V	12-12-12	"	200/75		Fair
C	00h05E	+44° 55		7.12	A2	12 12 12	"	400/150		Fair
A	01h05E	+73° 04'	1-2	7.52	A2	12 12 12	"	400/150		Fair
B	03h57E	+09° 43'	2"	3.66	B8p	no filter Her 3-3-3	Bln Sp Bin	20/70	2 Tau	Fair streaky
C	04h15E	+39° 59'	2"	2.71	B0.5 V	no filter 3-3 3	"	20/70	45 Per	Fair-poor clouds
A	02h00E	+50° 43'		5.62	B9 III	12-12 12	Hd Sp Bin	200/75		Fair
B	02h05E	+70° 53'		8.0	B4e	12-12-12	" "	400/150		Fair
									Dew Point @ 68°F MWR2	
									" " " "	
C	01h30E	+68° 00'		7.7	F2 II	12-12-12	Hd Sp Bin	400/175		Fair
A	02.39E	+39 59		2.71	B0.5 V	no filter 3-3 -3	Bln Sp Bin	20/70	45 Per	Fair guiding
B	01 46E	+09 43		3.66	B8p	no filter 3- 3 3	"	20/70	2 Tau	Fair guiding

9-17

B 0923
b 0922

Date 1973 09 24 Wed Cont. **Observer** Hns-Hu-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	Hns tried IR photometry but had trouble with his instrument so									
37632	HD 16440	02 33.2	+68 03	G12	IIaO6	13/1.5		02:20	03:20	A
37633	HD 23838	03 43.1	+44 40	"	"	"		03:23	03:38	B
37634	HD 28475	04h 24.2	+10° 18	"	"	"		03:43	04:12	C
37635	HD 29104	04h 29.8	+19° 41	"	IIaOB	13.5		04:14	04:46	A
37636	HD 33541	05h 05.9	+73° 09	"	"	"		04:51	05:15	B
37636T1	cal step wedge for plate 37633-34				IIaO6	108 sec				
37636T2	cal step wedge for plate 37635-36				IIaOB	108 sec.				
37637	HD 35189	05h 17.9	+16° 36	"	IIaOB	13.5		05:20	05:38	C

924-9059

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Dome Temp. .....

Transparency Conditions ..... good .....

Focus ..... 30 R .....

Dome Temp. ..... 45°F 92% .....

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	he gave up									
A	02:32W	+68 24	1-2"	8.0	B7 III	12-12-12	Hd Sp Bin	400/150		fair
B	01"44W	+43° 56'	"	5.79	gG5	12-12-12	"	200/90		fair
C	01"36W	+10° 31	"	6.55	B9	12-12-12	"	200/75		fair
A	02"06W	+19° 54	2-5	6.56	F8	12-12-12	"	200/90	suddenly colder & windy,	fair
B	01 05W	+73°17'	4-8	5.76	A0	12-12-12	"	200/80	haze developing, humidity	
					Dw MWP2 9mi @ 68°F				rising very rapidly	
C	02"10W	+16°45	3-4	6.09	A2 II	12-12-12	"	200/75		fair

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* baked Oct 23

Date 1973 Oct 24-25 Wed-Thurs **Observer** Ts-Af-Nurtmec Sima **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37638	4 Hei	15 52.1	+42 51	G12	IIaO(6)*	13/.5		18:12	18:30	A
37639	HD 183656	19^h 25.6	+3° 14'	G12	IIaO(4)*	13/.5		18:59	19:29	B
37639T	Cal star	edge	90sec		"					

Dome Temp. 60° H-73

Focus

Dome Temp. 50° H-100

Transparency Conditions Very hazy
Soup by 19h

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
A	4h 32W	+42° 42	3"-5"	5.6	Be	12-12-12	HD. Sp Bin	200/80		Fine
B	1 52W	+3 27	3"-4"	6.1	A0	12-12-12	G1- Shell	200/39	Fog	
									Dew 9mm @ 69° NW P2	

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* baked Oct 23

Date Oct 25-26/73 **Observer** LR.Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37640	HD 142926	$15^h\ 51^m.2$	+42° 51'	G12	IIaD	13/1.9	56°	18 07	18:40	A
37641	HD 188209	19 49.0	+46 46	"	"	9/1.5		19:01	19:31	B
37642	HD 180163	19 10.4	+38 58	"	"	13/1.5		19:53	20:30	C
37642 T	Comp sep	wedge	90sec		"					
37643	HD 14633	02 16.7	+41 02	"	"	13/1.5		20:17	21:25	C
37643 F1	focus test	out out/in in			"	13				I
37643 F2	focus test	out out/in in			"	13	56°			I

Dome Temp. 56° H=73%

Transparency Conditions Good - some haze

Focus .....

Dome Temp. .....

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
A	4 45W	+42 42	3"-4"	5.6	Be	12-12-12	Sp Bin - Hd	200/140	Approx ending time	Fine
B	1 40W	+47 00	"	5.54	O9.5III	12-12-12	Bin Search	200/90		Sl. hazy
C	02 48W	+39 10	"	4.3	B5V	12 12 12	6 std vol	200/70	some cloud	
									Ops Pam (63°F WNW)	
C	02 55E	+41 24	4"-7"	7.26	O8V	12-12-12	Bin. Search	400/180	cloud clouded out	Fine
B						5/5	filter			Hazy
C						5/5	no filter			ok.

15 Visitors - As't Chas
from Mars and Cloud

* baked Oct 23

Date Nov 1-2/73 Thurs-Fri **Observer** LRTN **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37644	HD 21364	03 21.8	+9° 23'	G12	IIIaJ	9/1.7		22:26	23:05	A
37645	HD 14633	02 16.7	+41 02	"	IIaO6*	9/1.5		23 14	00:03	B
37646	HD 48279	06 37.5	+1 49	"	"	13/1.5		00:13	02 40	A
37646T	Cal stop	wedge	10 min		IIIaJ					
37647	HD 23862	03 43.3	+23 51	"	IIaO6*	9/1.7	44°	02:45	03 03	B
37648	HD 21364	03 21.7	+9°23	"	IIIaJ	"		03 06	03 35	C
37649	HD 44351	06 20.5	+11 19	"	IIaO6*	13/1.5		03 41		A
[illegible]	[illegible]	[illegible]	[illegible]				42°			
37649T	Cal stop		90 sec							

Dome Temp. 40° H=73

Focus .....

Dome Temp. 30 H-90

Transparency Conditions ..... Excellent by 22h but windy

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
A	01 54E	+09°42'	3-4"	3.66	B8p	no filter 4-4-4	Sp Bin Eln	40/150	2 Tau	fine
	0 14W	+41 24	"	7.26	O8I	16-16-16	Bin Search LR	400/130		Suitable
	01 32E	+1 49	"	8.08	O8I	16-16-16	"	200/300		fine
	01 43W	+24 06	"	5.1	B2p	16-16-16	G1 Shell Stars	200/100		fine
	02 38W	+9 43	"	3.66	B8p	no filter 4-4-4	Sp Bin Eln	40/150	2 Tau	fine
	01 37W	+14 23	2-3	8.2	B3pe	16-16	G1 Shell	400/92	clouded out	fine
									Dew Point @ 6:00 = 11.0°F	

17 ~100 visitors - Seneca College - saw clouds. * Used Plate 4
** Used 1.0 2, but no calibration

Date Nov 5-6 1973 Mon Tues **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37650	HD 18.547	19 39.9	+13 04	G12	IIaO6*	13/.5	37°	17 59	18:26	A
	" 21458	20 00.9	+11 13	"	"	"		18:30		B
37651	HD 216494	22 48.2	-12 09	G12	IIaO6*	13/.5		20:33	21:05	H
37651 T1	Calib.		9 sec		"					
37651 T2			0 sec		IIa-f**					
37652	HD 21364	03 21.8	+9 23	G12	IIa-J	9/.7		21:11	22:00	E
	HD 225259	23 59.9	+61 45	"	IIaOL*	13/.5		22:06		C
37652 T1	Calib		16 min		III-J					
37652 F	Light	Test			IIaO	13	35°F			E

Dome Focus Dome

Dome Temp. 29° H = 822
Focus 55-A
Dome Temp. 27 H = 93

Transparency Conditions some cloud

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	1 25W	+13° 19'	3-4	6.1	B8IV	16-16-16	Hd Sp Bin	200/75		Fair
	~~+13 31~~			6.34	M2 III	16	"	~~200~~	cloud	
-	0 56W	-11° 42'	3-4	5.9	B7V	16-16-16	Hd Sp Bin	400/150		Poor
									Dev MWP2 Trans 6.60	
									" " " "	
	02h 42mE	+9 42	3-4	3.66	B8p	no filter 8-4	Sp Bin-Bin	40/160	2 images	Fair
			4-5	5.9	B7III	16	Hd Sp Bin	200/	cloud	
									Dev Trans MWP2	
										ok.
									cloud up 12:30 - snowing	

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Date Nov 6-7/72 Tues-Wed **Observer** Hns-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	Pleiades	JR Pilot		attempt				9		

Dome Temp. 31° H=83%

Transparency Conditions Clear by 1^h

Focus

Dome Temp. 29 93

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								clouded out 3^h30^m-	

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B Nov 4

Date Nov 7-8 1973 Wed-Thurs **Observer** Af-Ri/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37653	HD179343	19h 07.0	+2° 27'	G-12	IIaO B	13/.5	38°	17:50	18:27	A
37654	HD 193182	20h 13.8	+39° 17'	G-12	IIaO B	13/.5		18.32	18:55	B
37655	HD 195407	20h 26.0	+36° 39	G-12	IIaO B	13/.5		19:00	19:54	C
37656	HD 218393	23h 02.6	+49°40	G-12	IIaO B	13/.5		19:58	20:22	A
37657	HD220300	23h 17.6	+55°49	G-12	IIaO B	13/.5		20:26	21:30	B
37658	HD 23862	034 13.3	+28° 51	G-12	IIaO B	9/.7	36°	21:37	21:50	C
3765871	focus test exposure				IIaO	9				B
3765871	cal step wedge for plates 37653-58				IIaO B	108 sec.				

Dome Temp. 32° 63?.

Focus 55R

Dome Temp. 29° 73?°

Transparency Conditions some hazy and thin clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02406W	+02040'	3	7.1	B9	16-12-16	G1-SLC	4m/140		fair
01"30W	+39°34	3	6.4	A0e	16-16-16	"	2m/70		fair
02"16W	+36°59'		8.1	B3e	16-16-16	"	4m/140		fair
04 06W	+50°05'		6.99	A5p	16-16-16	"	4m/140		fair
01 00W	+56°16'		7.8	B8	16-16-16	"	4m/140		fair
03406E	+24°07		5.1	BBp	16 32	"	4m/64	clouds and one dew plane	poor
					4-4 no	fellow			ok
								This whole pitch is	
								small windows in cirrus	

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* Vacuum treated

Date 8/9 NOV 1973 THUR/FRI **Observer** D.W.-R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37659	HD 21364	03H 21M.8	+9° 23′	G-12	IIIa-J*	9/1.7	38°F	21:00	21:30	A
37660	HD 24760	03H 57M.1	+39° 43′	G-12	IIIa-J*	9/1.7		21:33	21:44	B
37661	HD 21364	03H 21M.8	+9° 23′	G-12	IIIa-J*	13/1.7		21:48	22:11	C
37662	HD 24912	03H 52M.5	+35° 30′	G-12	IIIa-J*	13/1.7		22:14	22:37	A
37663	HD 21364	03H 21M.8	+9° 23′	G-12	IIIa-J*	13/1.7		22:40	23:[illegible]	B
37664	HD 23862	03H 43M.3	+23° 51′	G-12	IIIa-J*	9/1.5		23:08	00:27	C
37665	cal step wedge	dup of 37659-			IIIa-J*	8 min				
37665	HD 21364	03H 21M.8	+9° 23′	G-12	IIIa-J*	13/1.7		00:30	00:48	A
37666	HD 26961	04H 10M.7	+50° 03′	G-12	IIIa-J*	9/1.5		00:52	01:35	B
	IR photometry							05:15	05:30	

Dome Temp. 25° H=65%

Focus 55R

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3h02E	+9° 43'	4-5	3.66	B8p	4-4-4	Sp. Bin-Bln	40/145		fine
03h17mE	+39° 59'	4-5	2.71	130.5Z	7-7	Sp. Bin-Bln	40/138	Cloud	SS strong
02h19E	+9° 42'		3.66	B8p	5-5-5	Sp. Bin-Bln	40/145		fine
02h25E	+35°48'	2-3	4.04	07	5-5-5	Sp. Bin-Bln	40/144		SS strong
01h26mE	+9°42'		3.66	B8p	5-5-5	Sp. Bin-Bln	40/141		fine
00h25mE	+24°07		5.1	B8p	5-5-5	G1 shell	80/240		fine
								na 63 Dec MWP2 8 min @ 65°=	
00h19W	+9°42'		3.66	B8p	5-5-5	Sp. Bin-Bln	40/141		fine
00h15W	+50° 16'		4.57	A2	5-5-5	Sp. Bin-Bln	40/112		fine
								(bubbles in condo.)	

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* Vacuum Spectrograph
B 10 or 4

Date Nov 9-10/73 Fri-Sat **Observer** R.L. - M.E.F **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37667	HD21364	3h 21.8m	+9° 23'	G-12	IIIa-J	13/.7	32°F	22:25	22.47	A
37668	HD 24912	03h 52.5	+35° 30'	G-12	IIIa-J	13/.7		22:49	23:24	A
37669	HD21864	03h 21.8	+09° 23'	G-12	IIIa-J	13/.7		23 34	23:56	A
37670	HD 24760	03h 51.1	+39° 43	G-12	IIIa-J	13/.7		00 06	00:13	A
37671	HD 21364	03h 21.8	+09° 23	G-12	IIIa-J	13/.7		00:21	00:45	A
37672	HD 249161	04h 10.7	+50° 03	G-12	IIIa-J	13/.7		00.49	01:19	A
37673	HD 21364	03h 21.8	+09° 23	G-12	IIIa-J	13/.7		01:33	01:53	A
37674	HD 88052	04h 20.7	+15° 23'	G-12	IIIa-J	13/.7		01 56	03.00	A
37674/1	cal step wedge for plates 37667 - 37673				IIIa-J	6 min				
37674/2	cal step wedge for plates 37674 -				IIIa-J	6 min				
37675	HD 21364	03h 21.8	+09° 23'	G-12	IIIa-J	13.7		03:04	03:32	A
37676	HD 30739	04h 45.2	+08° 44	G-12	IIIa-J	13/.7		03:38	04:16	A
37677	HD 21364	03h 21.8	+09° 23	G-12	IIIa-J	13/.7		04:20	04:50	A
37678	HD 41161	05h 58.2	+46° 15	G-12	IIIaJ+B	13/.5		04:59	05:37	A
37678/1	cal step wedge for plates 37678				IIIaJ+B	10 min				
37679	HD 45542	06h 23.0	+20° 17'	G-12	IIIa-J	13/.5	24°F	05:43	06:19	A

Dome Temp. 20° H = 70%

Focus 55R

Dome Temp. 18°F 95% I = 01 04E

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01"39 E	+9°43'		3.66	B8p	5-5-5	Sp. Bi W - Bl n	40/144	§ Tau	fair
01"34 E	+35°46'	4-5	4.04	O7	5-5-5	"	40/144	§ Per	fair strong
00"30 E	+09°45'		3.66	B8p	5-5-5	Sp. Bri - Bl n	40/146	§ Tau	fair
00"44 E	+39°59'		2.71	BO.5II	7-7	Sp Bri - Bl n	40/150	ε Per	fair strong
00"16 W			3.66	B8p	5-5-5	Sp Bri - Bl n	40/148	§ Tau	fair
00"10 W	+50°16'		4.57	A2	5-5 5	Sp Bri - Bl n	40/146	b Per	fair
01"37 W	+09° 44'		3 66	B8p	5-5-5	Sp Bri - Bl n	40/141	§ Tau	fair
01"35 W	+15°40'		4.73	FOII	5-5-5	Sp Bri - Bl n	40/200	71 Tau	fair
								Dew 9 min @ 08°F MNP	
								" " "	-
03"09 W	+09° 43'		3.66	B8p	5-5-5	Sp Bri - Bl n	40/146	§ Tau	fair
00"26 W	+08°55'		4.32	A0 I	5-5-5	Sp Bri - Bl n	40/146	2 Ori	fair
04"05 W	+09° 44'		3.66	B8p	5-5-5	Sp Bri - Bl n	40/110	§ Tau western limb of	fair weak
02"34 W	+48°17'		6.51	B0	11-11-11	Sp Bri - Bl n	40/140		fair strong
								Dew 9 min @ 09°F MNP	
02"12 N	+20° 15'		4.04	B7Ia	5-5-5	Sp Bri - Bl n	40/147		fair

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* baked Nov 4

Date Nov 14/15 1973 Wed-Thurs **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37680	HD 199579	20 53.5	+40 47	G12	IIaO-6+	91.5	53°F	17:50	18:08	
37681	HD 225289	23 59.9	+60 45	"	"	131.5		18:13	18:26	C
37682	HD 10260	01 35.3	+60 32	"	"	"		18:35	19:20	C
37682T	Cal step wedge		90sec		"					
37683	HD 11291	01 45.8	+50 18	G12	"	13/1.5		19:26	20:05	A
37683F	Focus			"		13	52°.			b

Dome Temp. 54°F 62%
Focus 55-R
Dome Temp. 48 70%

Transparency Conditions Haze + cloud
Complete cloud by 2015

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 29W	+41 07	1-2"	3.96	A0V	18-14-16	Sp Bin Pla	200/30	cloud	Fine
2 20E	+61 12	2"	5.9	B7III	16-16-16	Hd Sp Bin	400/140		Fine
3 03E	+60 57	2-3	5.58	B7V	16-16-16	"	400/140		Fine
								Dew 9min @ 69°F MWP2	
2 27E	+50 42	2-3"	5.62	B9III	16-16-16	"	400/102	*overdevelop please*	Fine
	1.1.1 / output				c/5	no filter			

29

* dated Nov dated Nov 16

Date Mon-Tues Nov 19-20 **Observer** Hu-Ta **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37689	HD 186547	19 39.9	+13 04	G12	IIaO*	13/1.5	40°	18:03	15:25	A
37689 7	Cal 5 Cyg	"	"	"	"	"	"	"	"	"

Dome Temp. 38° 17:9.7½

Focus .....

Dome Temp. 35 96

Transparency Conditions Hazy but good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
219W	+13 18	2"	6.1	88 IV	11-16-16	Spin-Hd	200/75		E

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* baked Nov 16

Date Thurs-Fri Nov 22-23 '73 **Observer** GI-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37685	HD 195325	$20^h 25.5^m$	$+10° 34'$	G12	IIaO-*	13/.5	47°	19:29	19:50	A
37686	HD 218154	$23^h 00.6^m$	$+24° 07'$	"	"	"		20:19	21:02	B
37687	HD 21364	$03^h 21.6^m$	$+09° 23'$	"	IIIa-J	9/.7		21:13	21:36	C
37688	HD 23862	03 43.3	+23 51	"	IIaO-*	"		21:49	22:03	A
37689	HD 15130	$02^h 21.1^m$	$-12° 4'$	"	"	9/.5		22:16	22:24	B
37689F	Focus			"			46°F			
37689T1	Calibration	Step Wedge		98 or	IIaO-*					
37689T2	"	" "		6 min	IIIa-J				3	

Dome Temp. 46° 47%

Focus

Dome Temp. 42 94%

Transparency Conditions very good - 5'-7' - 20

me	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	1	03h 10m W	+10° 54'	2-3	5.92	A0	12-32	G1 Shell	—		fair
	2	01 48 W	+24° 34'	2"	7.01	A0	16-16-16	Bln-Sp. Bin	—		fair
	3	02 06 E	+9 42	1½"	3.66	B8p	4-5-2	"	—		fair
	4	01 55 E	+24 07	"	5.1	B8p	16-16-16	SHELL-G1	200/210	?	fair
	5	00 08 E	-12° 20'	3"-4"	4.85	B9V	16-16-16	Bln-Sp Bin	200/—		fair
							5/5	no filter		cloud	
										Dew 9 min @ 66°F MWP2	

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Date Fri-Sat Nov 23-24/73 Observer Ir-Tm/Tu-Rak Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37690	HD 200905 ε Cyg	21h 01.3	43° 32	G12	IIIaJ	13/1.9	49°	18:02	19:00	B
37691	61 Cyg A HD 201091	21 05.9 02.4	38' 37 15	"	"	18/1.9	"	19:15	20:46	A
37692	HD 27371 8 Tau	4h 14.1	15° 23	G12	"	13/1.9		22:56	00'03	B
37692T1	Cal strip	edge	3 min		"					
37692T2	"	"	6 min 35 sec							
37693	HD 21364	03 21.8	+9 23	G-2	Da	9/1.7		00:10	00:30	C
37694	HD 24760	03 51.1	+24 43	"	"	"		00'35	00'42	A
37695	HD 24912	03 52.5	+35 30	"	"	"		00:50	01'08	E
37696	HD 21364	03 38	+9 23	"	"	"		01:13	01:34	A
37697	b Per	04 10.7	+50 03	"	"	"		01:38	02:30	E
37698	HD 21364	03 31.8	+9 23	"	"	"		02'34	02:10	A
37699	HD 25563	04 22.3	+15 57	"	Da0.5	9/1.5		03:15	04:23	D
37699T	Cal strip edge		90 cc		"					
37699F	Focus	Fast		G12	35-A	9	42°			B
37700	HD 29488	04 12.8	+2 44	"	IIIaJ	9/1.5	"	04:42	05:10	A

Dome Temp. 47° H=77%
Focus Set 35-R From 55-R
Dome Temp. 37° H=73%

Transparency Conditions Very Good
Some cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 50W	43° 53	2"	5,4	K4III	3-3-3	Tr - Grant	40/350		
05 34W	38° 42	2"-5"	6.4	K5I	3-2-3	"	100/956	from 55-R	
00 22E	+15 39	2"-3"	4.6	K0III	3-2-3	"	20/175		
				Dev 9min		69°=MWP2		Labeled Regions	
01 00W	+9 49	2-3'	3.[illegible]	[illegible]	3-3-3	[illegible]	1[illegible]/144	E Tau	
00 43W	——	2"	2.71	[illegible]	[illegible]	"	40/165	E Per	
01 04W	+35 48	"	4.4	G2	3-3-2	"	40/130		
02 05W	+9 45	"	3.66	[illegible]	3-2-3	"	40/143		
02 [illegible]W	+50 [illegible]	1"-2"	4.57	K2	4-2-2	"	40/150	cloud	
02 40W	+9 43	2-3	3.66	[illegible]	2-3-2	"	40/155		
03 50W	+16 11	2-4	7.14	F8	16-11-79	"	480/130	cloud	
								Dev 9min - Color MWP2	
		[illegible]			[illegible]	[illegible]		bkgd. [illegible]	
00 16E	+2 28	2-4	3.72	[illegible]	16-16-16	[illegible]	30[illegible]/45	very cloudy	

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started Nov 16

Date 25/26 NOVEMBER '73 SUN/MON Observer Sowers Bln-Tn/Ta- Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37701	HD 198183	20h 43m.5	+36° 07'	G-12	IIIa-J	13/1.5	41°F	17:38	18:00	A
37702	HD 206267	21 35.9	+57 02	"	"	"	"	18:03	20:04	L
37703	HD 213534	22 26.9	+29 02	"	IIa-O+2	"		20:14	20:47	A
37704	BD+61 670	03 57?	+62 03?	"	"	18/1.5		20:56	22:46	E
37705	HD 21364	03 21.8	+9 23	"	IIIa-J	9/1.2	37°F	22:53	23:13	C
37706	HDR363	04 23.3	+15 57	"	IIa-O+2	13/1.5		23:17	0:00	B
37706 F1	Focus	Test		"	"	13	36°F			F
37706 T1	Col step	wedge		6min	IIIa-J					
37706 T2	Col step	wedge		90sec	IIa-O+2					

Dome Temp. 32° H: 85/0

Focus 45-R

Dome Temp. 29° H: 95/0

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 15W	+36 28	2-4"	4.42	B-V	3-4-3	Sp. Bin-Bln	40/110		
0228W	+57 25	"	5.83	06	3-3-4	"	100/310		
0214W	+29 29	"	6.28	A5	16-16-16	"	200/75		
[illegible]	+62 19	"	7.12	[illegible]	16-16-16	"	200/400	[illegible]	
0011E	+9 42	1-2"	3.66	Rp	4-3-3	"	40/140	5 Jan	
[illegible]	+16 12	2"	7.19	F8	16-16-16	"	200/100	[illegible]	
								-9±3	
								Dec 9 min (~64°F Mult 2	
								" " "	

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Date Fri Sat Nov 30 Dec 1 1973 **Observer** IR-RI/HasRi Pak **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37707	HD 206778	21h 39.3	9° 25	G-12	IIIaj	13/.9	42°F	18:11	18:14	A
37708	HD 210745	22 07.4	+57° 42'	G-12	IIIaj	13/.9		18.51	19.08	B
								19 59	20:40	
37708+1	cal. step wedge				IIIaj 3 min					
37709	HD 21364	03h 21.8	+09°23	G-12	IIIaj	9/.7		01:46	00:18	A
	IR Photometry							00:45	05:00	
37710	comet k Shajn-Schaldach 1973e	15.40 1930	-20° 00		IIaO3	32/.5		06:20	06:47	B

Dome Temp. 30°F 90%

Focus 500R

Dome Temp. 20°F 70%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01"22W	+09°50'	3'	3.98	K2Ib	3-3 3	1r-Cont	20/232		fair
		3'	4.96	K1.5Ib	3	"		cloud from NW 2nd count at 34	fair
22"51W					3-3		20/137		
								Dev 9 min @ 60°F HUNT 2	
03"15W	+05°42'		3.66	BBp	3-3-3	B1a-Sp Bri	40/144		fair
					½				
20"30E	+20°50'				16.32	←	800/222	overlap plane	
								no visible sky absorption	
								some faint emission lines at last	
								need longer exposure, starting	
								earlier (could probably have	
								gone 10m more into dawn)	

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3 Nov 16

Date Sat Sun Dec 1-2 1973 Observer McFadden RJ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37711	HD 198183	20h 43.5	+36° 07'	G-12	IIIaj	13/.7	32°F	18:22	18:52	A
37712	HD 206267	21h 35.9	+57° 02'	G-12	IIIaj	13/.5		18:56	19:54	B
37713	HD 218154	23h 00.6	+24° 07	G-12	IIaO B	13/.5		19:59	20:34	C
37714	HD 21364	03h 21.8	+09° 23'	G-12	IIIaj	9/.7		20:42	21 10	A
37715	HD 24534	03h 49.1	+30° 45'	G-12	IIaO B	13/.5		21:18	21:38	B
37716	HD 28363	04h 23.3	+15° 57'	G-12	IIaO	9/.3		21:4.	22:17	—
37717	HD30869	04h 46.2	+13° 29'	G-12	IIaO	9/.3		22:22	22:43	A
37718	HD 21364	03h 21.8	+09° 23	G-12	IIIaj	9/.7		22:49	23:14	B
37718T1	cal step wedge				IIIaj	6 min				
37718T2	cal step wedge				IIaO	90 sec				
37719	HD 24760	03h 51.1	+39° 43	G-12	IIIaj	9/.7		23:20	23:29	
37720	HD 24912	03h 52.5	+35° 30'	G-12	IIIaj	9/.7		23:33	23:58?? 00:58	
37720T1	focused IR photometry	65R mm/min			IIaO	9	30°F			
									02:30	

Dome Temp. 28°F 86%
Focus 65 R
Dome Temp. 20°E 89%

Transparency Conditions hazy at first getting better

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02h30W	+36°28'	3'	4.42	B5V	3-3-3	B/A - Sp Bi	40/141		fair
02h42W	+57°25'		5.83	O6	3-3-3	" "	80/240		fair
01h54W	+24°36'		7.01	NO	16-16-16	" "	400/121		fair
01h49E	+09°43'		366	BBp	3-3-3	" "	40/144	} Tau	fair
01h49E	+31°00'		6.0-6.6	Op	16-16-16	" "	200/70	× Per	fair
01h44E	+16°10'		7.14	F8	16-16-16	" "	400/100		fair
01h42E	+13°40'		7.10	F5	16-16-16	" "	400/100		fair
00h15W	+09°40'	3'	366	B8p	3-3-3	" "	40/150	} Tau	fair
								Dew 9 min @ 65°F MWP2	
								" " "	
10°03W									
00h32E	-39° 59'		2.71	B0.5V	3-3-3	" "	40/150	ε Per	string
00h46W	+35° 47'		4.04	O7	3-3-3	" "	40/150	ζ Per	string
					5/5			ok. (-2 < 50°)	very faint
01 26W	→ I would End time exposure t	say HA = 00h26W is really 23:58; (ie pl no 37695)			and that based on prev. (SAS 1990)			clouds coming up from SE. clouded over by 03 00	

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BNW16

Date Sa Mo Su 2-3 1973 Observer Saunders R. / R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37721	HD 21364	03h 21.8	+9° 23'	G-12	IIIaj	9/.7	34°F	23:02	23:41	A
37721T1	cal step wedge				IIIaj	6mi				
37722	HD24760	03h 51.5	+39° 43	G-12	IIIaj	9/.7		01:02	01:18	B
37723	HD 26961	04h 10.7	+50° 03	G-12	IIIaj	9/.7		01:17	02:20	C
37724	HD 41161	05h 58.2	+48° 15'	G-12	IIaOB	13/.5		02:36	03:13	
37725	HD 53755	07h 01.1	−10° 30'	G-12	IIaO13	13/.5		03:00	03:26	B
37725	cal 24 wedge				IIaO13	90sec				

Dome Temp. 32°F 97%

Focus 6.5 R

Dome Temp. 40°F 98%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00"45W	+9° 42	4	3.66	BBp	3-3-3	Bn-Sp Bn.	40/145	clouds to west Dew 9min @ 60°F HW1/2	fair
01"45W	+40° 80		2.71	B0.5	3-3-3	" "	40/144	clear up again	fair
03"34W	+50° 18'	5	4.57	A2	3-3-3	" "	40/145		fair work
01"20W	+48° 16		6.51	B0	16-16-16	" "	20/70		fair
00"52W	-10° 33		6.38	B3	16 32	Hd-Sp Bn	40/62	stop upon moon because dew started to form on secondary mirror	work
				Dew 9min @ 64°F HW1/2					

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* baked Dec 2
** Vacuum treated

Wed-Thurs

Date DEC 12-13 '73 Observer WEST-TN/Bh-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37726	BD+27°943	5h54.7m	+27°16'	G12	IIIa-O*	13/5	32°	23:34	00:13	A
37727	β GEMINORUM	7h39.3m	+28°16'	"	"	"	"	00:18	00:20	B
37728	BD+27°943	5h54.1	+27 16	"	"	"	"	00:27	01:16	C
37729	β GEMINORUM	7h39.3m	+28°16'	"	"	"		01:22	01:24	D
37729T	Cal step	wedge	90sec		"					
37730	HD 21364	03h21m.8	+9° 23'	G-12	IIIa-J**	13/7		01 31	02:30	B
37730T	Cal step	wedge	6 min		IIIa-J**			31 45		
37731	71 Tau	04 20.7	+15° 23'	"	IIIa-O*	13/9		02:37		C

Dome Temp. 27° +72°

Focus 65-R

Dome Temp. .....

Transparency Conditions Clear by 0"

Time	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3	I	0:35 E	+27° 20'	2-3	6·8	K2III	12-18-16	West P.S	400/220		
0	C	2:14 E	——	"	1.4	K0III	22-26	"	40/19		
6	C	0:28 W	+27° 19	2"-5"	6·8	K2III	16-16/6	"	400/220		
1	A	01h 08m E	——	"	1.9	K0III	24-24	"	40/18		
					Dew	MW#2	9 min no Filter	@ 68°F		Lake [illegible]	
0	C	04 15 W		3:0"	3.66	B8p	3-3-	Sp. Bin-Bin	40/150	cloud	Very weak
					Dew	MW#2	9 min	@ 68°F			
			+15° 36'	2·4"	4.73	F0V	16	Sp. Bin-Bin	40/		

45

* Vacuum treated

Date Dec 14-15 Fri-Sat /72 **Observer** Ir-Tm/Tr-Rak **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37731	HD 200905	21 01.3	+43 32	G12	IIIa-J*	13/1.9	23°	17:31	20:43	A
37732	HD 3627	0h 34.0	+30 19	"	"	"	18°	20:49	22:35	B
37733	HD 29139	4 30.2	+16 18	"	"	"	17°	22:44	23:00	A
37734	HD 31398	4 50.5	33°00	"	"	"		23:09	00:17	B
37735	HD 21364	03 21.8	+9 23	"	"	13/1.7		00:22	01:34	C
[illegible]	[illegible]	[illegible]	[illegible]		"					
37736	HD 24760	03 [illegible]	+19 [illegible]	G12	"	[illegible]		01:40	01:54	A
37737	6 Per	04 10.7	+50 03	"	"	9/1.7		02:04	04:16	C
37738	HD 29488	04 [illegible]	+2 44	"	"	13/1.7	12°	04:23	06:30	A
37739	Focus			"	IIIa-J	"	12°			F

Dome Temp. +12°F
Focus R-75 - R-85-
Dome Temp. +60

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
3h 55W	+43 53	4-10"	5.41	K4+5V -II	3-3-3	Ir-Grad	40/500	R-75	1.69	Fair
3 15W	30 48	"	4.52	K3 III	3-3-3	"	40/435	54 R-75	1.31	Fair
0h 40E 1-1E EX	16° 31	4-6"	2.39	K5 III	3—3	"	40/350	R-85	1.53	Fair
0h 40W	33° 11	3-5	4.23	K3 II	5—3	"	40/433	"	1.47	Fair
3 27W	+ 1 43	"	3.66	K5	3-3-3	Sprin-Ele	40/160	cloud		cloud
								Dew MWP2 T.= 68°F		
3 20W	+40 00	4-6"	2.71	K0 III	3-3-3	"	40/140			Fair
5 18W	+50 18	"	4.57	A2	3-3-3	"	40/120	cloud		
2 37W	+ 2 30	"	3.82	[illegible]	5-4	"	40/140	cirrus		
								dewing start		
						Locked				
						but				

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H1

* Objective Prism 2
** Vacuum Chamber
*** Short vacuum treatment (4 hrs)

Date Dec 15-16 Sat Sun /72 **Observer** Tn - Ms Fedden **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37739	HD218154	23h 00.6m	+24° 07'	G12	IIaO-6*	13/1.5		17:41	18:17	A
37740	HD206267	21 35.9	+57 02	"	"	13/1.7	17°F	18:21	19:05	B
37741	HD213534	22h 26.9	+23° 02	"	"	13/1.5		19:11	19:37	C
37742	HD198183	20 43.5	+36 07	"	IIIaJ**	13/1.7		19:43	20:19	A
37743	HD218154	23 00.6	+24 07	"	IIaO-6	13/1.5		20:25	21:29	B
37744	HD 213364	02 21.8	+9 23	"	IIIaJ**	9/1.7		21:30	22:06	C
37745	HD11291	01 45.8	+50 18	"	IIaO-6	13/1.5		22:11	22:20	A
37746CTI	Comp Lamp		20 sec		"					
37746	HD218159	23 00.6	+24 07	"	"	13/1.5		22:25	22:58	B
37747	HD21364	02 21.8	+9 23	"	IIIaJ**	9/1.7		23:02	23:20	C
37748	χ Per	03 49	+30 45	"	IIaO-6	13/1.5		23:24	23:46	B
37749	HD24760	03 51.1	+39 43	"	IIaJ***	9/1.7	15°	23:52	0:00	C
37750	6 Per	4 10.7	+50 03	"	"	"		00:23	01:07	B
37751	71 Tau	4 20.7	+15 23			"		1:12	02 17	C
37752	HD28363	4 32.3	+15 57	"		9/1.5		2:22	03:30	A
37752CTI	Col 378		6 min		IIIaJ**			~~2:07~~	~~2:52~~	

Dome Temp. 11°F 14-712

Focus .....

Dome Temp. .....

Transparency Conditions Good - some [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 34W	+24° 30	2-3"	7.01	A0	16-16-16	Sp Bin - Blu	400/140		sl weak
2 48W	+57 26	"	5.83	O6	16-16-16	"	200/98	cloud [illegible]	[illegible]
2 28W	+29 26	"	6.28	A5	16-16-16	"	400/150		weak
4 54W	+36 27	"	4.42	B5V	no filter 3-3-3	"	40/150		[illegible]
3 42W	+24° 35	"	7.01	A0	full w 16-16-16	"	400/150	cloud 2:35→55	sl weak
0 02W	+09 43	1½"	3.66	B8p	no filter 3-3-3	"	40/165	cloud	
1 51W	+50 45	"	5.52	B9V	16-16-16	Sp Bin - Blu	200/75		[illegible]
								Dew. 9 mi @ 68° NW 12	
5 16W	+24 34	3-4	7.01	A0	16-16-16	Sp Bin - Blu	400/120		[illegible]
1 16W	+09 42	1-2"	3.66	B8p	no filter 3-3-3	"	40/144		[illegible]
1 14W	+31 00	"	6.0-6.6	Op	16-16-16	"	200/65		
1 25W	+40 00	"	2.71	B0.5I	5-5-6		40/130	Ether	[illegible]
2 13W	+50 18	"	4.57	A2	3-3-3	"	40/155		[illegible]
3 14W	+15 38	2-3"	4.73	F0V	3-3-3	"	40/210		[illegible]
4 25W	+16 10	2-3"	7.14	F8	16-16-16	"	200/95		"
				Dew	9 mi @ 68° F NW PP			[illegible]	[illegible]

49 #2

Date Dec 16 Observer Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37753	HD 24912	03 52.5	+35 30	61	IIIa-J	9/1.7		03:36	03 43	C
37754	HD 41161	05 58.2	+19 15	"	"	9/1.5		03:58	04:30	A
[illegible]	Carina	[illegible]	6 min		IIIa-J			16:00	22:00	
37755	HD 104451	11 56.6	+30 06	G2	IIa-D	18/1.3		04:39	05:41	B
37756	HD 87504	10 00.3	-12 35	"	IIa-J	13/1.5		05:51	06:37	C
——	Kohoutek	15 49.2	-25 43					06:40	-07:00	

Dome Temp. +2° H. 83%

Transparency Conditions Photometric

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5 09W	—	3"	4.04	07	16-87	Sp Bin-Ha	40/21	& Per	
3 45W	+28 18	"	5.51	B0	15-16 16	"	200/80		"
0 58E								Dw 9mi 66°F mw P2	
1 05E	+29 45	3"	8.7	F3	16-16½	"	400/110		
1 57W	-12 52		7.51	B35	3-3-3	"	40/120		
								Visual observation very difficult to distinguish from background light	

#1

51

* baked Dec 16
* short term vacuum pcs

Date Dec 16/17 Sun-Mon / 73 **Observer** Th - Saunders / Has **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37757	HD 3712	00 34.8	+15 59	G12	IIa-O*	9/.5	12°F	17:33	17:35	B
37758	HD 218154	23 00.6	+24 07	"	"	13/.5	12°F	17:45	18:30	C
37759	HD 206267	21 35.9	5°02'	"	"	13/.5		18:36	18:51	B
37760	HD 14951	02.19.3	10°09'	"	"	9/.5	13°F	19:22	19:42	A
37761	HD 21364	03 21.8	+9 23	"	IIIa-J*	13/.7		19:48	20:32	B
37761T	Cal step wedge		90 sec		IIa-O*					
37762	HD 11291	01 45.8	50 18	G12	"	13/.5		20:10	20:50	C
37763	HD 213534	22 26.9	+29 02	"	"	"		20:56	21:32	A
37763T	Cal step wedge		6 min		IIIa-J*					
37764	HD 218154	2300.6	+24 07	G12	IIa-O*	13/.5		21:36	22:26	B
37765	HD 21364	03 21.8	+9 23'	"	IIIa-J*	9/.7		22:30	22:59	A
37766	HD 32363	04 33.3	+15 57	"	I-O*	9/.5		23:04	00:12	C
37766FI	Focus Test			"	IIa-O	4	11°F			
Some	IR Photometry of Plejades, but conditions bad.									
37767	HD 24760	03 51.1	+39 43	G-12	IIIa-J*	9/.7		01 56	02:06	B

Dome Temp. +9° H=62%

Focus Changed from 85-R - 95-R

Dome Temp. .....

Transparency Conditions Excellent 99 air well, hazing over most of the sky

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1.39 E	56°26	2"	3.34	KO II	16-30	Std Vel	40/16		wet
1.47W X	24°36?	3"	7.01	A0	16-16-16	Spec-Blu	400/150	*bad guiding performance	" *
2.38W	57°26	3-4'	5.83	O6	16-16-16	Spec in-Blu	200/70	(reduced due to dust)	" *
1 16E	10°34	"	3.38	B6	16-16-16	"	200/70	Dome not tracking	" *
1 29E	9°43'	"	3.66	BBp	3-3-3 no filter	"	40/180	" 13 slitting minutes	slt wet *
								Dew 9min@68°F MWP2	blunt
0 25W	50°43'	2"	5.62	B9 III	16-16-16	Spec in-Hd	200/70		*
0 27W	29°30'	2-3"	6.28	A5	16-16-16	Spec in-Blu	200/75		*
								Dew 9min@68°F MWP2	blunt
0 48W	24°35'	3-4	7.01	A0	16-16-16	"	400/150		*
1 00W	9°43'	2-3"	3.66	Bp	3-3-3	"	40/165	no filter	wet
1 11W	16°10'	3-4'	7.14	F8	16-16-16	"	400/180		"
3 36W	———	2"-6'	2.71	BD+ II			40/140		dry
								Cont - over	

53 #2

Date Dec 17 1900am **Observer** Leavitt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37758	HD 24912	03 52.5	+35 30	612	IIIaJ*	9/1.7		02:13	03:04	A
	2 R Photometry	attempted (seeing too bad)								
37769	HD 111611	05 50.2	+48 15	612	II-O-3	13/1.5	9° F	03:[illegible]	04:[illegible]	P
37770	HD 104451	11h 56m.6	+30°06'	612	IIIaO*	18/1.5		04:30	6:[illegible]	C

Dome Temp. .....

Transparency Conditions .....

Focus .....

Dome Temp. +2° H=91%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 34 W	+36° 47'	10-00	4.04	07	3-3-3	Sy Gal Nuc	40/150		
03 47 W	+45 18	"	6.51	B0	16-16-16	"	400/140		fair
0 20 W	+29 44	"	8.7	gF3	14-14-14	"	409/160		guider is weak
	6.7								
	1.1								
	3								

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* baked Dec 16

Date Mon-Tues Dec 17/18 1973 **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37771	HD 28475	04 24.2	+10 18	G12	IIa 0 b*	13/1.5		00:13	00:59	A
37772	HD 35189	05 17.9	+16 36	"	"	"	10°	01:03	01:21	B
37773	HD 37171	05 31.5	+10 58	"	"			01:25	02:20	A
37773T	Cal step	wedge	90 sec		"					
37774	HD 53755	07 01.1	−10 30	"	"	13/1.5		02:26	02:56	B
37775	HD 44637	06 17.7	+15 09	"	"	"		03:00	04:26	C
37776	HD 51892	06 53.9	+7 27	"	"	"		04:30	05:02	A
37777	HD 72208	08 26.5	+10 09	"	"	"		05:07	05:57	C
37778	HD 153720	16 56.0	+75 34	"	"	"		06:05	06:53	A

Dome Temp. 2°F @ 73%

Focus .....

Dome Temp. .....

Transparency Conditions some cloud, high winds later: photometric

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 00 W	+10° 30'	3"	6.55	B9	14-14-14	Hd Sp Bin	200/80	cloud	Sundry sl weak
01 30 W.	+16° 44'	2"-3"	6.09	A2 V	15-15-13	"	200/80	sl weak	
02 15 W	+11° 06'	"	5.98	K2 III	16-16-14	"	200/140		Sundry very weak
								Dec MWP2 @68°F 9 min	
01 21 W	-10 34	3-4"	6.38	B3	15-15-15	Hd Sp Bin	400/180	close companion (on slit)	Sundry Bin
03 35 W	+15 12	2"	7.7	B3e	15-15-15	"	400/180		Sundry sl weak
03 35 W	+7 24	3"-5"	6.35	B7 V	15-15-15	"	400/180		"
02 58 W	+9 56	"	6.58	A0	15-15-15	"	400/180	some cloud	"
04 30 E	+75 29	4"-6"	6.84	F0	15-30	"	400/195		"

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* Varroum
** Out of Dec 18

Date Tues - Wed Dec 18/19 1973 **Observer** Hu - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37779	HD 10516	01 37.4	50 11	G12	IIIaJ*	13/.5	10°F	19:24	19:31	A
37780	HD 21364	03 21.8	+09 23	"	"	9/.7		19:39	19:59	B
37780T	Col stop	edge	6min		"			~~10 15~~	~~16 15~~	
37781	HD 23862	03 43.3	23 51	"	IIaO6**	9/.7		20:07	20:18	A
37782	HD 23838	03 43.1	44 40	"	"	13/.5		20:26	20:42	B
37782T	Col stop	edge			IIaO6					
37785	HD 16066	02 29.8	67 38	"	"	13/.5		20:54	21:52	C
37784	HD 16440	02 33.2	68 03	"	"	"	9°	21:57	23:05	A
37785	HD 23838	03 43.1	-44 40	"	"	9/.5		23:11	23:37	C
37786	HD 23475	04 24.2	+10 18	"	"	"		23:45	00:21	A
37787	HD 29104	04 29.8	+19 41	"	"	"		00:24	01:09	B
37788	HD 35189	05 17.9	+16 36	"	"	"		01:15	01:38	A
37789	HD 37171	05 31.5	+10 58	"	"	"		01:41	02:48	B
37790	HD 44637	06 17.7	+15 09	"	"	"		02:54	04:34	C
37791	HD 72208	08 26.5	+10 09	"	"	13/.5		05:00	06:30	A

Dome Temp. +7° H=75

Focus .....

Dome Temp. +6° H=80%

Transparency Conditions ..... Some cloud
Photometric later

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 38E		1-2"	3.95	$B0_p$	3-3-3	Hd Sp Bin	40/100	∅ Per	
0 53E	+9 43	"	3.66	$B8_p$	3-3-3	Bln Sp Bin	40/150	2 Tau	
—	"								
0 57E	+24 06	1-2"	5.1	$B8_p$	15-15-15	G1 Shell	40/20	Pleione	
0 33E	+44 57	"	5.79	gG5	15-15-15	Hd Sp Bin	200/110		
0 49W	+67 59	1-2"	7.7	F2 II	15-15-15	"	400/220		
1 59W	+68 23	1"	8.0	B7 II	15-15-15	"	400/170	seems [illegible]	
1 23W	+64 56	"	5.79	gG5	15-15-15	"	200/110		
1 26W	+10 32	1-2"	6.55	B9	15-15-15	"	200/80		
2 10W	+19 53	"	6.56	F8	15-15-15	"	200/110		
1 50W	+16 46	"	6.09	A2 V	15-15-15	"	200/80		
2 45W	+11 07	"	5.98	K2 III	15-15-15	"	200/150		
4 07W	+15 12	"	7.7	B3e	15-15-15	"	400/130	haze coming	
3 35W	+10 00	"	6.58	A0	15-15-15	"	400/140	cloud finally!!	

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Date Dec-21-22 1973 Fri-Sat Observer IR-RI/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37792	HD 200905	21h01.3	43°32	G-12	IIIaj*	13/.9	18°F	17:30	17:40	A
37793	HD 201091	21 02.4	38°15	"	"	"	18°F	17:45	18:41	B
37794	2 Per A	02h 43.4	+55 29'	"	"	13/.9	17°F	18:56	20:37	C
37795	δ And A HD 12533	01 57.1	41°51	"	"	"	17°F	20:46	21:11	A
37796	HD 11291	01 45.8	50°18	"	IIaO3	13/.5	17°F	21:16	21:29	B
37797	HD 20630	03h 14.1	+3° 00	"	IIIaj*	13/.9	17°F	21 39	00:53	C
37798 37797T1	cal step wedge	for plates 37792-95, 96-800			IIIaj	6 min				
37799	HD 21364	03h 21.8	+09°23	"	IIIaj	13/.7		00:59	01:04	A
37799	HD 24760	03h 51.1	+39°43	"	IIIaj	9/7		01:29	01:39	B
37800	HD 24912	03h 52m.5	+39°30'	"	"	"		01:44	02:07	C
37801	HD 220052	23h 20m.7	+15°23'		"	13/.5		02:12	03:16	A

Dome Temp. 10°F 75%

Focus 9.5R

Dome Temp. .....

Transparency Conditions clear - very windy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
1h 21 W	43° 54	3"	5.41	K4	3-6	Ir-Grant	40/33	1/10 exp	1.69	
3h 20 W	38 42	3"	6.38	K5	3-6	"	400/504	1/10 exp	1.19	
00h 25 E	55° 53'	2	5.42	F3 F6 III	3-3-3	"	40/550		1.66	
00 54 W	42° 18	3	~3	K3	3-3-3	"	40/408		?	
01 42 W	50° 46	2	5.62	B9 III	16-16-16	HW - Sp Bin	20/75			
03 20 W	+ 3° 20'	3	5.50	G5 V	3-33	Ir - Cam	40/400		0.08	
03 45 W	+ 09 43'		3.66	B8p	3-3-3	13h - Sp Bin	40/160			
03 30 W	+ 40° 00	3	3.71	B0.5	5-5	"	40/140			
03 56 W			4.05	O7	5-5	"	40/141			
04 37 W	+ 15° 40'		4.73	F0 V	3 3 3	"	40/150			

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no. * ~~clock 6 min slow~~ (wrong date!)

Date Dec 23-24 1973 Sun Mon **Observer** Sandra Ridl-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37802	HD 206267	21 35.9	57°02'	G12	IIIaJ+OG	13/1.7	26°F	17:30	17:50	A
37803	HD 213534	22 26.9	29°02'	G12	IIIaJ+OG	13/1.5		17:56	18:22	B
37804	HD 218154	23 00.6	24°07'	G12	IIIaJ+OG	13/1.5		18:27	19:04	C
37805	HD 213654	22 21.8	9°23'	G12	IIIaJ+E	9/1.7		19:09	19:34	A
37806	HD 24534	03h 49.1	+30° 45.1'	G-12	IIIaJ+OG	13/1.5		19:40	20:05	B
37807	HD 24760	03h 51.1	+39° 43'	G-12	IIIaJ E	9/1.7		20:10	20:20	
37808	HD 24912	03h 52.5	+35° 30	G-12	IIIaJ E	9/1.7		20:25	20:52	A
37809	HD 26961	04h 10.7	+50° 03	"	IIIaJ E	9/1.7		20:58	21:48	B
37810	HD 28363	04h 23.3	+15° 57	"	IIIaO 13	9/1.3		21:53	22:36	C
37811	HD 30869	04h 46.2	+13° 29	"	IIIaO B	9/1.3		22:40	23:18	
37811 T1	cal step wedge for plates 37805, 07-09				IIIaJ E	6 min				
37811 T2	cal step wedge for plates 37802-04, 06, 10-11				IIIaO B	90 sec				
37812	HD 28052	04h 20.7	+15° 23'	"	IIIaJ E	13/1.5		23:23	00:09	
37813	HD 25638	03h 59m.0	+62° 03'	"	IIIaJ+OG	13/1.5		00:15	00:53	C
37814	HD 25639	03h 59m.0	+62° 03'	"	"	"		00:56	01:27	A
37815	HD ~~24762~~ 24760	03h 51.1	+39° 43'	"	IIIaJ	9/1.7		01:31	01:40	B

Dome Temp. 15°-82%

Focus 95R

Dome Temp. .....

Transparency Conditions Clear-Photometric

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h 5W	57°26'	4'	5.82	O6	16-16-	Sp. Bin-Bln	200/130		
1h 45W	29° 28'	4'	6.28	A5	16-16-16	Sp. Bin-Bln	200/60	cirrus clouds	
01h 51W	24° 35'		7.01	A0	16-16-16	Sp Bin-Bln	400/120		
01h 59E	9° 43'		3.66	B3p	3-3-3	Sp Bin-Bln	40/140		
01h 55E	31° 02'		6.6	Op	16-16-16	Sp Bin-Bln	200/70		
01h 44E	41° 50'		2.71	B0.5I	3-3-3	" "	40/146		
01h 10E	35° 43'	3-4	4.04	O7	3-3-3	" "	40/142		
00h 35E	59° 13'		4.57	A2	3-3-3	" "	40/141		
00h 02W	16° 12'		7.14	F8	16-16-16	" "	400/100		
05h 21W	13° 41'		7.10	F5	16-16-16	" "	400/100		
01h 38W	15°37'	4	4.73	FOI	3-3-3	Sp Bin-Bln	40/150		
02h 40W	+62° 20'	6-8	7.0	B0	15-15-15	Sp. Bin-Bln	400/130	ADS 2984B	
03h 15W	+62° 80'		7.0	B0	15-15-15	"	400/130	ADS 2984 A	
03h 38W	+40° 15'		7.71	O7.5I	3-3-3	"	40/140		

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Date Dec 23-24 1973 cont **Observer** Bla-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37816	HD 24912	03h52.5	+35°30	G-12	IIIaJ	9/1.7		01:44	02:12	C
37817	HD 41161	05h58m.2	+48°15′	G-12	IIa-Ob	13/1.5		02:16	02:39	A
37818	HD 104451	11h56m.6	+30°06′	G-12	IIa-Ob	13/1.5		02:45	05:41	B
~~37819~~	~~HD 130841~~	~~14h 7m.4~~	~~+12° 58′~~	G-12	~~IIIaJ~~	9/1.5		05:46		C

Dome Temp. .....

Transparency Conditions .....

Focus .....

Dome Temp. 3°F 72°/o

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04"10W	+35° 50'		4.04	07	3-3-3	Sp Bi - Bl	40/140		
02"27W	+48° 20'		6.51	B0	15-15-15	Sp. Bin-Bln	300/65		
00 25 E	+29°45'	3-4	8.7	gF3	15-15-15	Sp. Bin-Bln	300/300	Cloud at end	
	-15° 52'		2.89	A5II	3	Sp. Bin-Bln	40/	Cloud	

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* Vacuum treated

Date 1933 Dec 30 Sun-Mon **Observer** Th-Sanders **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Ang End
37819	HD 21364	3" 21.8	9°23'	G12	IIIaJ*	9/.7	24°	17:48	19:20	A	145
37819T	Cal step	wedge	6 min		"						
37819F	Focus	Test	"	"	IIaO	9	23			B	

Dome Temp. 17° 83%

Focus changed to 81.5-R

Dome Temp. .....

Transparency Conditions Some smoke cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 45W	+9 42	3-4"	3.66	Rep	no filter 4-4"	9-Binn-Bkgd	40/93	cloud * over-done by please	
	in in [illegible] out				3/3	no filter			

67

MON/TUE

Date 1973 DEC 31/1974 JAN 1 Observer Bln Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
37820	HD21364	$03^{H}\ 21^{M}.7$	$+9°\ 23'$	G-12	IIIa-JE	9/17		17:32	17.59	A	
37821	HD21364	$03^{H}\ 21^{M}.8$	$+9°\ 23'$	G-12	IIIa-JE	9/17		18:01	18:32	B	
37822	HD21364	$03^{H}\ 21^{M}.8$	$+9°\ 23'$	G-12	IIIa-JE	13/17		18:34	19:25		
	Too much cloud. Even insanity has its limits.										
	HAPPY NEW YEAR Jim, Archie, and										

Dome Temp. 18°F H=82%

Transparency Conditions Fair — Awful

Focus .....

Dome Temp. 16°F H=91%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
$5^{3}03^{M}E$	+9° 38'	2	3.66	138p	No Filter 3-3-3	Sp. B.-Bl.	40/140		
$02^{H}30^{M}E$	+9° 38'	2	3.66	138p	3-3-3	Sp. B.-Bl.	40/140		
$01^{H}36^{M}E$	+9° 38	2	3.66	138p	3-3-3	Sp. B.-Bl.	40/137	cloud	
ITS	PARTY	TIME!							
								NEW YEAR's NIGHT	
								WAS PHOTOMETRIC, TOO	
								BAD. LOST 13 HOURS.	

69

+ baked & vacuum

Fri

Date 1974 Jan 4 Observer Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37823	HD 104451	11 56.6	+30 06	G12	IIaO-*	18/9	22°F	04:07	04:[illegible]	A

70

Dome Temp. 17° H=92%

Transparency Conditions Clear by 3:30

Focus

Dome Temp.

overdevelop plate

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 30 E	+29 49	2"	8.7	gF3	15-15-10	Sp [illegible]	40m/70	thin cloud (clearing)	Good

71

* vacuum

Date Fri Sat Sun 4-5 1974 **Observer** FR-RI / Rch-RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37824	H 200905	21h 01.3	43° 32	G-12	IIIaj*	13/.3	23°	17 43	20 20	A
37825	HD 27371	4h 14.1	15° 23	"	"	13/.9	18	20 32	22:14	B
37826	HD 29139	4h 30.2	16° 18	"	"	13/.9	18	22:19	22:39	C
37826T1	cal. step wedge	for plate ~~37824~~ 28			IIIaj	6 min				
37827	HD 31398	4h 50.5	33° 00'	G12	"	13/.9	·	22:49	00:01	A
37828	HD 21364	03h 21.8	+05° 23	G-12	IIIaj	9/.7		00:06	00:41	B
37829	HD 24760	03 51.1	+39°43	G-12	IIIaj	9/.7		01:00	01:18	C
37830	HD 41161	05h 58.2	+48° 15'	G-12	IIIaOE	13/.5		01:25	02:19	A
37831	HD 42560	06h 06.3	+14° 14'	G-12	IIIaOE	9/.5		02:29	02:43	B
37832	HD 93702	10 44.0	+11° 04	G-12	IIIaj	13/.5		02:52	04:32	C
37833	HD 110411	12 36.8	+10° 47'	G-12	IIIaj	13/.5	15°F	04:40	06:06	A
37833T1	cal step wedge for plates 37824-27 & 37829, 37832-33				IIIaj	6 min				
37833T2	cal step wedge for plates 37830, 31				IIIaOE	90 sec.				

Dome Temp. 15°F 70%

Focus 82R

Dome Temp. 8°F 83%

Transparency Conditions clear with scattered clouds 72

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
5h 56	+43°52'	3	5.41	K4	3-3	Ir-Grant	200/1338		1.69	fine
0h35W	15° 37'	4	4.65	K0	3-3-3	"	40/450		0.99	fine
0h45W	16° 28'	5	2.39	K5	3-3-3	"	40/500	clouds	1.53	fine
								clear 12 min @ 70°F mwp2		
01h47W	33° 07'	5	4.23	K3	3-3-3	"	40/600	clouds	1.47	fine
04h02W	+09°40'	5	3.66	B8p	3 6	Sp Bri-Blr	40/70	Stars clouds (overdevelop please)		fog
04h02W'	+39°57'		2.71	B0.5I	3-3-3	" "	40/145			SE snow
02h56W	+48° 15'		6.51	B0	16-16-16	" "	200/70	clouds		fine guiding
03h15W	+14° 15'		4.18	B3V	16-16-16	" "	20/72			night fog strong
00h25W	+10°44		5.29	A2V	3-3-3	" "	200/550			fog
00h10W	+10° 25'		4.97	A1V	3-3-3	" "	200/550	clouds		fog
								Dew 12 min @ 70° mwp2		
								" " " "		

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Date Sat-Sun Jan 5-6/74 **Observer** Tu-Nie F **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37834	1+D21364	3h21.8	+9°23'	G-12	IIIaJ	9/.7	20	17:39	18:25	A
37834T	col stop	wedge	6 min	"	"			35:03	"	
37835	HD 24760	3 51.1	+39 43	G-12	"	9/.7		18:32	18:42	B
37836	x Per	3 49.1	+30 45	"	IIaO-6	9/.5		18:54	19:50	C
37837	HD21364	3 21.8	+9 23	"	IIIaJ	9/.7		19:55	20:40	A
37837T	Col stop	wedge	90sec		IIaO-6					
37838	63 And	2 14.4	+50 03	G-12	IIIaJ	9/.5	20°F	20:45	21:10	C
37838F	Focus	1		"		9	20°F			B

Dome Temp. +18 72%

Focus

Dome Temp. +14 89%

Transparency Conditions Thickening cloud

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
25	h	2 16E	+9° 38'	2"	3.66	$B8_p$	No filter 3-3-3	Sp Bin-Bin	40/140	cloud	fair
										Dec. 9 min @ 68°F MWP2	
	h	2 30E	—	1-2"	2.71	B0.5V	3-3-3	"	40/137		fair guiding
50	C	1 20E	+30 59	"	6.0-6.6	S_p	filter 15-15-15	"	200/70	near moon, some cloud	poor guiding
40	h	0 02E	+9 39	2"	3.66	$B8_p$	No filter 3-3-3	"	40/148	cloud	fair
										Dec 9 min MWP2 @ 68°F	Sudden weak
)	C	2 36W	+50 03	2-4"	5.44	A_p(Si)	4-5	Sp Bin-Hd	200/240	cloud (cut short)	
							5/5	no filters			

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Date Sun-Mon Jan 6-7/74 **Observer** Tn-Saunders **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37839	HD21364	$3^h 2^m.8$	$+9°23'$	G-12	IIIa-j	9/.7		19:46	20:36	A
37840	HD15130	2 21.1	$-12\ 44'$	"	"	9/.5		20:41	22:33	B
37841	HD24760	$3^h 51^m.1$	$39°43'$	"	"	9/.7	19°F	22:38	22:54	C
~~37842~~	~~HD 37962~~	~~3 52.5~~	~~+35 30~~	"	"	"		22:59	23:49	A
37842	HD 11291	1 45.8	+50 18	"	IIaO-b	13/.5		23:53	00:32	B
37842T	Cal step	wedge	6 min		[illegible]					
37843T	Cal step	wedge	40sec		IIaO-b					

Dome Temp. 18° H: 97%

Focus .....

Dome Temp. 12° H: 98%

Transparency Conditions cloudy - clearing

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
36	A	0 0W	+9°39'	2-4"	3.66	B8p	no filter 3-3-3	Sp Bin Pln	40/140	Some cloud	2 guiding fair
33	B	0 25W	+12°20'	3-6	4.85	B9V	3-3-3	"	40/90	Hit edge of platform	weak
4	C	0 47W	+39°57'	2-3"	2.71	B0.5V	3-3-3	"	40/130		SE. strong
9	A	0 40W	+35 46	"	4.04	07	3-3-3	"	40/120	cloud (maybe Mont. tooth ?)	
2	B	0 30W	+50 43	3-4"	5.52	B9V	16-16-16	Sp Bin-Hd	20/70	cloud	fair guiding
										Dew 9m @ 69°F WMUP2	

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Date Mon/Tues/Wed 2/4/74 **Observer** Tm-Hns-GI/Tm-Hns **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37844 '43'	Gmc Nebula	20 56	-13 22	G12	Ila-06	18/.7		17:55	18:[illegible]	A
	IR Phot	Pleione						19[illegible] —	21:30	
37845 '44'	Pleione	03 43.3	+23 51	G12	IIaO-b	9/.7		21:54	22:27	B
37846 '45'	HD 44351	06 16.3	+14 21	"	"	13/.5		22:34	00:12	C
37846 T	Cat-stop:	wedge	90 sec		"					
[illegible]	IR Phot —		3C 273	cstds				00:30	- 7' —	

Dome Temp. 15° H: 627

Transparency Conditions Excellent - Some haze

Focus .....

Dome Temp. 6° H=90%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5 10W					15-0-12	Comet	2-V30	*Overdeveloped Mouse	fingerprints
1 32W	+24 05	2-4	5.1	B8p	15-15-15	Shell-61	200/110		fair
045W	+14 20'	"	8.2	B3pe	15-15-15	"	400/145	Moonlight!	
								Dew 9min @ 60°: Hum 2	
								Warren - we need more	
								IIIa-J's put in vacuum	
								today.	
								Tom	

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Date Friday Jan 11th -12 1974 **Observer** Tn-Jurg **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37846	Kohoutek	21 43	-9 35	G12	IIa O*	36/.9		18:00	19:30	A
37847	HD 213234	22 26.9	+29 02	"	"	13/.5		19:47	20:51	B
37848	HD 1241	01 43.8	+50 18	"	"	"	17°F	21:01	22:10	C
37845	Cal stds		90 sec		"					
37849	HD 21364	3 21 E	+9 23	G12	"	9/		22:24		

Dome Temp. 15° H=E02

Transparency Conditions Excellent

Focus

Dome Temp. 12° H 87½

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4 53W	-9°35'				10-10-10	Comet NN	400/100	* Overdevelop Please	fair
5 29W	-2926	3-4	6·3	A5	15-15-15	Sp Pic - Blg	400/170		smudges smeared poorly guided
3 [illegible]W	+5028	"	5·62	B7 II	15-15-15	Sp Bin - Hd	200/52	Obs. Dis 2mi NW of Cost	
			~~5·6~~	~~B5~~	~~15~~	~~Sp Bin~~	~~200~~	cloud very thick	

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Date Sept - Jan 12-13 1974 **Observer** MD Hms / Tebbutt // R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37849	Kohoutek	21° 54.974	−8 56.974	G-16	IIaF	36/1.5		17:55	19:32	A
	IP Plate						6°F	2r 00	01:20	
37850	HD 27822	10 00.5	+30° 06	G-12	IIaO B	13/1.5	6°F	2r 25	03:00	B
37851	HD 101 22	11 33.5	+45° 15	G-12	IIaO B	13/1.5		03:12	04:03	B
37852	HD 103482 B	11 49.9	+49 06	G-12	IIaO B	13/1.5		04 13	04:57	C
37853	Kohoutek	Plate 37850			IIaO B	90sec				
37854	HD 103483 A	11 49.9	+49 02	G-12	IIaO B	13/1.5		05:01	05:35	A
37855	HD 103510	12 30.1	+45° 56	G-12	IIaO B	13/1.5		06:10	06:53	B

Dome Temp. +05°F 78%

Focus 80°R

Dome Temp. 0°F 85%

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h47m47W	-8 38				no filter 3-3-3	Comet NN	40/80		
1h25W	-3°45'	3	6.60	F5	15-15-15	Water Cloud	40/160		Fine
0h24E	+45°15'		6.90	G0	15-15-15	"	40/160	"	Fine
1h16W	+46°37				15-15-15	"	40/110		Fine
0h53W	+46°38'		6.46	A0	15-15-15	"	40/120		Fine
0h20W			6.84	F2	15-30	"	40/60	Clouds (cirrus) on horizon	

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Date Sun Mon Tue 12/14 1913 Observer NN Saunders R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37855	Kohoutek	1914 22.06	1914 −7 47	G-12	IIa O	36.7	12°F	17h 55	19.52	F
37856	HD218154	2300.6	+24° 07'	G-12	IIa o b	13/.5		20h 11		
37856	HD11291	01h 45.8	+50° 13'	G-12	IIa o b	13/.5		20h 20	20:34	D
37857	HD21364	03h 18	+20° 23'	G-12	IIa j	7/.5		20h 38	21:35	C
3785771	cal slop wedge				IIa o b	90 sec.				
37857F1			untrusted		IIa j	4	31°F			A
" F2					"	9				B
" E2					"	18				C
" F4					"	13				D

Dome Temp. 05°F 82%

Focus 9.0°R

Dome Temp. 04°F 83%

Transparency Conditions clear - hazing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5h 00W	−7°41(−73')				10-15-10	Comet NN	800/271	overdevelop plane	
	+24°32'		7.61	Ag		~~Sp Bm-Bln~~	400/		
1h 59 W	+56°48'	2	5.62	5-11	15-15-15	Hd/Sp Bm	200/72	dark	fine
1h 24 W	+9°42'	2	3.66	Bdp	3-6	Sp Bm-Bln	8½/135	" overdevelop plane	grainy
								Dew 9min @ 69°F Hum 82	
					4s out	4s in		Set 90-R just plunged finely in	
					"	"		" "	
					"	"		" "	
					"	"		57-R "	

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Date Sat Sunrise Jan 1920 174 **Observer** Jn - McFadden **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37858	KOHOUTEK	23h 21m 11s	−1° 55′	61/2	[illegible]	56.9	24°F	12:12	19:14	K
37859	HD 1929	01 45.8	+50 18	"	"	136.5		19:52	20:10	E
37860	HD 21364	03 21.8	+9 23	"	IIIaJ	9/.7		20:14	20:54	C
37861T	Calibration	[illegible]	90 sec		IIaD					
37862	HD 24760	03 54.1	+39 55	61/2	IIIaJ	9/.7		20:59	21:04	A
37863	[illegible]	04 25.3	+15 37	"	IIaD	9/.5		21:11	22:19	E
	IR Phot -	Hα5	Tg					23-	04-	
37864T	Cal. Hg	[illegible]	5 min		IIIaJ					

Dome Temp. 18° H-65%

Focus 57-R → 70-R

Dome Temp. .....

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:44W	−1° 51′		57-R		13-12	comet run	900/40	Some [illegible]	Good.
1:55W	+50 42	3-4'	5162	G9 III	1545-15	Spec. Hg	200/70		Fair
1 37W	+9 41	"	366	K5	3-3 ?	Spec. Hg	90/150		Sl. wk
								Dew 9pm @ 60°F mw#2	
0 50W	+34 47	4	271	G5V	3-3	"	40/		Sucking
1 50W	+16 08		7.4	F8	1575	"	40/		Sucking
								thin cloud	
								Dew 9pm @ 60°F mw#2	

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Date Thurs, Jan 24/74 **Observer** Tu-Hua **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	IR Pict							0^h	6^h	
	of 3C273,	4 stds								

Dome Temp. 28° 11-9C

Transparency Conditions Some haze at times

Focus .....

Dome Temp. 28° 11-47

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

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Date ... Observer ... Julian Day ...

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37863	HD 23262	03h 41m 3	+23° 51'	6in	IIa-0	3/.7	32°F	22:05	23:46	A
37863T	Cal slit	"	Same		"					
37864	[illegible]	03h 41m 1	+23° 15'	"	IIa-0	10/5		00:06	00:33	B
37865	HD 23262	11 29.8	+10 32	"	"	15/5		00:40	01:01	A
37866	"	"	"	"	"	"		01:24	02:13	B
37867	HD 23262	11h 29m 8	+10° 31'	6in	IIa-0	13/5		02:14	02:45	C
37868T	Focus					12/	30			

90

Dome Temp. 22° 8-4-93

Focus changed to 7-1 coR

Dome Temp. 26° H=77%

Transparency Conditions Hazy thin cloud hazy!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0M 09W	-124° 06'	3.4"	5.1	BBp	15-15-15	GI Shell	200/		fair
02 28W	-48° 15'	"	4.51	BO	15-15-15	Sp Bin Blu	450/140		fair
02 00E	"	"	6.8-7.1	FO+F2	15-15-15	"	400/160		fair
01 16E	"	"	"	"	15-15-15	"	140/160		fair
00 41E	"	"	6.8-7.09	FO+F2	15-15-15	Sp Bin Blu	400/	OVERDEVELOPED	seeing fair
								* conditions approx	

911

Date 25/26 Jun 74 FRI/SAT **Observer** It-Tn/Tn-Kai **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37868	HD 29371	4h 14.1	15° 23'	G12	IIIaJ	13/.3	33	18:10	19:11	C
37869	Cal-edge	edge	6 min		"					
37870	HD 29136	4h 30.3	16° 19	G12	"	13/.9	35°	19 25	19:57	B
37871	HD 31318	4h 50.5	33° 00	"	"	13/.9		20:31	22:10	A
37872	HD 58207	7h 16.5	28° 00		"	13/.3		22:30	23:13	B
37873	HD 21364	3 21.8	+9 23	"	IIaJ-b	9/.7		23:22	23:49	C
37874	[illegible]	7 28.9	+24 38	"	IIIaJ	13/.3		23:47	00:29	B
37875	HD 91181	10 58.2	+45 15	"	IIaO-E	13/.5		00:45	01:24	C
37876	HD 99946	11 24.8	+20 32	"	"	18/.5		01:40	02:24	B
37877	HD 93702	10 44.0	+11 09	"	IIIaJ	9/.5	35°	02:37	05:07	C
37877	HD 99946	11 24.8	-30 32	"	IIaO-E	13/.6		05:14	05:49	B
37878	"	"	"	"	"	18/.5		05:54	06:27	C
37879	"	"	"	"	"	18/.5		06:27	06:51	A
37880	Cal-edge	edge	8 min		IIaO-b					

Dome Temp. 36°F RH = 81%

Focus 607

Dome Temp. 25°F

Transparency Conditions Good

#2 #4 #5 #6 #7 #9

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 1 05E	15° 38'	2	B 4.65	K0 III	3-2-2	Ir - Giant	40/200	Stopped 18:40 - 18:45 B-V 0.99	
								Dew 9 min @ 60°F MWPR	
0 36E	16° 31'	2	2.39	K5 III	2-2-2	Ir - Giant	40/100 B	1.53	
1:17W	33° 09'	1½	4.23	K3 II	2-2-2	"	40/200	1.47	fine
0:09E	27° 53'	3	4.31	G1 III	2-2-2	"	40/200	0.99	fine
4:16W	9° 43'	4-10	7.16	B8 p	15-15-15	Sp. Bin. Bln	40/23	1.46	fine
1:03W	+34 29	3	4.09	G8 III	2-2-2	Ir - Giant	40/200	0.97	fine
3:23W	+48 16	3-6	6.51	B0	15-15-15	Sp. Bin. Bln	400/160		slowly
1:02E	+30 08	<1-2"	6.8 - 7.1	F0 + F2	15-15-15	"	400/190		
2:23E	+10 44	"	5.29	A2 V	2-2-2	"	100/200		
2 23W	+30 07	"	6.34 - 7.09	F0 + F2	15-15-15	Sp. Bin. Bln	400/160		
3:00W	+30 08	"	"	"	15-15-15	"	400/160		
3:26W	"	2"	"	"	15-15	"	400/125		
								Dew 9 min @ 60°F MWPR	

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Date Wed Thurs Jan 30-31 1974 Observer [illegible] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37880	HD 111588	01 44.9	+46 58	G-12	IIIaO13	13/1.5	38°P	18 40	19:33	A
37881	HD 29104	04 29.8	+19° 41	G-12	IIIaOB	13/1.5		19:42	20:25	B
37882	HD 28363	04 23.3	+15° 37'	G-12	IIaOB	9/3		20:30	21:07	C
37883	HD 30869	04 46.2	+13° 57'	G-12	IaOB	9/3		21:11	22:08	A
37884	HD 21364	03 21.8	+9° 23'	G-12	IIIaJ	9/7		22:12	23:18	B
37885	HD 24760	03 51.1	39° 48'	G-12	IIIaJ	9/7	40°F	22 26	23 49	C
37886	~~HD 79302~~ HD 79469 (SAO 97)	09 09.2	+02° 44'	G-12	IIIaj	13/1.5		00:00	00 49	A
37887	HD73262	08H 32M.4	+06° 03'	G-12	IIIaJ	13/1.5		00:51	02:24	B
37887T1	cal step wedge for plate 37880	-83, 88			IIIaOB	90 sec.				
37887T2	cal step wedge for plate 37887				IIIaj	6 min				
37888	HD 74180	08H 38M.0	+3° 45'		IIIaOb	9/9		02:27	02:43	C
37889	HD93702	10H 44M.0	-11° 04'		IIIaOb	9/9		02:47	03:18	A

Dome Temp. 30°F 82%

Focus 600R

Dome Temp. 38° 75%

Transparency Conditions hazy + cirrus

tried to find the comet

Time	PR	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3	A	02h05W	+47° 20'		7.14	B8	16-16-16	Sp Bin Hd	400/130		fair
05	B	00h10W	+19° 54'		6.56	F8	16-16-16	" "	400/160		fair
7	C	01h00W	+16° 09'		7.14	F8	16-16-16	Sp Bin Blu	400/100		fair
	A	01h40W	+13° 36'		7.10	F5	16-16-16	Sp Bin Blu	400/100		fair
15		04h15W	+09° 42'		3.66	B8p	3-3-3	Sp Bin Blu	40/131	overdevelop plane	guiding
09	C	04h16W	+39° 55'		2.71	B0.5	3-3-3	Sp Bin Blu	40/150	change to 50R	guiding
09	A	00h40E	+02° 28'		3.82	B7 IVn	3-33	Sp. Bin.-Blu	200/500		fair
24	B	02h10W	+05° 51'		4.14	A0V	3-3-3	Sp. Bin.-Blu	200/500		fair
										Dec MWP2 9mi C. 66 —	
										" " "	
13	C	03h25W	+03° 32		4.10	B3V	15-15-15	Sp. Bin.-Blu	40/35		guiding
18	A	00h54W	+10° 44'		5.19	A2V	15-15-15	Sp. Bin. Blu	80/50		fair
										Warren: need done more IIIaj plates	

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Date Sat Sun Feb 2-3 1974 Observer R. Has -Rak- Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37890	HD21364	$3^h 21.^m8$	+9° 23'	G-12	IIIaJ	9/.7	14°	18:13	19:06	1.
	1R	Photometry						19:30	23:15	
37891	HD45542	$6^h 23.^m0$	+28° 17'	G-12	IIaOB	9/.7	10°+	23:37	23:44	13
37891T1	color wedge				IIIaJ		6 min			
37891T2	" "				IIaUB		90 sec.			

Dome
Focus
Dome

Hour Ang
End

Dome Temp. 60°F 61%

Focus 85°R

Dome Temp. 60°F 61%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h15w	+09° 42'	4"	3.66	B8p	333	Sp Rw Bh	40/145"		fine
01h50w	+20° 16'		4.04	B7IIIp	15-15	" " "	80/40	cloudy 9:15	fine
								Dew 9m: MWP2 @68°F	Cy .12
								" " " "	Cy .22

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Date Sun Mon Feb 34 Observer Saunders - P/R Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37892	HD 11291	01h 45.8	+50°18	G-12	IIaO B	13/1.5	12°F	18:15	18:26	A
37893	HD 21[illegible]	3h 21.8	9° 23'	G-12	IIaj	9/1.7		18:32	19.05	B
37894	HD 24760	3h 51.1	39°43'	G12	IIaj	9/1.7		19:10	19:23	C
37895	HD 24534	03h 49.1	+30° 45	G-12	IIaO B	13/1.5		19:28	20:05	A
1496	HD 23363	04h 23.3	+15°57'	G-12	IIaO B	9/1.3		20:11	21:04	B
37897	HD 30869	04 46.2	+13° 29'	G-12	IIaO B	9/1.3	12°F	21:08	21 46	C
37897T1	cal. strip wedge	for plates	37893, 94		IIaj	6 min				
37897T2	cal strip wedge	for plates	37892, 95		IIaO B	90 sec				
37898	HD 37473	05h 33.7	-2° 39'		IIaO B	13/1.5		21:54	22:47	A
37899	HD 41161	05h 38.2'	48° 15'		IIaO B	13/1.5		22:54	23.47	B
37900	HD 42545	06h 05.3'	16° 29'		IIaO B	13/1.5		23:56	00.14	C
37901	HD 72208	08h 36.5	+10 09	G-12	IIaO B	13/1.5		00:20	01 14	A
37902	HD 99946	11 24.8	+30° 32	G-12	IIaO B	13/1.5		01.25	02 22	B
37902F1	focus test	on a/f			IIaO	13	8°F			B

Dome Temp. 3°F 61%

Focus 90 R

Dome Temp. 0°F 83%

Transparency Conditions some thin cirrus

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h12W	50°45'		5.62	B9III	15-15-15	Sp Bri Hal	400/142		fair
00h40W	9°41'	3	3.66	B3p	3-3-3	Sp Bri Blu	40/150		Fair
00h15W	39°57'	3	2.71	B0.5V	3-3-3	Sp Bri Blu	40/148		sl strong
00h48W	31°01'	3	6.0-6.6	Op	15-15-15	Sp Bri - Blu	400/140		sl strong
01h15W	16°07'	3	7.14	F3	15-15-15	Sp Bri Blu	400/100		Fair
01h34W	+13° 40'		7.10	F5	15-15-15	Sp Bri Blu	400/160		Fair
								Dev 9 ma @ 66° NWP2	fg .12
								Dev 9 ma @ 66° NWP2	fg .24
01h46W	2°36'	3	6.32	B3p	15-15-15	Sp Bri Blu	400/140		fair
02h21W	48°15'	3	6.51	B0	15-15-15	Sp Bri Blu	400/140		sl strong
02h42W	16°10'	3	4.75	B5V	15-15-15	Sp Bri Blu	400/140		sl strong
01h23W	+09°56'		6.58	A0	15-15-15	Sp Bri Hal	400/140		Fair
00h08E	+30°08'		6.84 7.09	F0+ F2	15-15-15	Sp Bri - Blu	400/116	clouds over desktop planet	fair
					5-5 ma	filter			ok

Date Mon-Tues Feb 4-5 Observer GL-R:/Mas-R: Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37903	HD 23862	$3^h 49^m.3$	+23° 51'	GIZ	IIIa-J	13/.5	10°F	18:25	20:00	A
37904	HD 37479	$5^h 33^m.7$	-02° 39'	"	IIa-Oa	13/.5		20:55	21:27	B
37905	" "	$5^h 33^m.7$	-02° 39'	"	"	"		21:32	22:00	C
37905T1	cal step wedge				IIIaj	6mm				
37905T2	" "				IIa-OB	90mm				
37906	HD 51418	$06^h 52^m.2$	+43026	"	IIIaJ+OG13	9/.5	7°F	22:07	22:42	A
	IR Photometry							22:45	06:10	

Dome Temp. +010°F 62%

Focus 90 R

Dome Temp. −040°F 64%

Transparency Conditions cirrus
clear after 22:00

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 55mW	24° 07′	1-2″	5.1	B8p	3-3-3	G1-Shell	200/600	clouds	fair
01h 34mW	-02° 33	2-3″	6.71	B3V	15-30	rG *	400/62	overdevelop plane; wrong *	fair
01h 41mW	-02° 33	〃	6.71	B3V	15-15-15	〃	400/140		fair
								Dew 9pm C 68°F mw#2	Cy .11
								〃 〃 〃 〃	Cy .22
03h 24mW	+42° 25′	2″	6.61	A0p	15-15-15	G1 Ap	400/140		fair
								Warren: We need to move IIaD & look up	

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Date Feb 5/6 1974 Observer CM-RV Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37907	HD 23838	03h 43.1	+44° 40	G-12	IIIa-O B	13/1.5	8°F	18:30	18:52	A
37908	HD 28475	04 24.2	+10 18	G-12	IIIa-O B	13/1.5		19:01	19:46	B
37909	HD 29104	04 29.8	+19° 41	G-12	IIIa-O B	13/1.5		19:50	20:27	C
37910	HD 31867	04h 57.2	+31 00	G-12	IIIa-O B	13/1.5		20 35	21:43	D
37911	HD 48638	06h 39.3	+27 47	G-12	IIIa-O B	13/1.5		21:48	22:25	E
37911-1	Cal 03h 00 with 2L				IIIa-O B	90 sec				
37912	HD 44637	06h 17.7	+11° 09'		IIIa-O B	13/1.5		22:54	23 41	C
37913	HD 74469	09h 09.2	-02°44'	G-12	IIIa-O B	3/1.5		00 55	1 02	A
37914	HD 93702	10h 44.0	+11° 04	G-12	IIIa-O B	9/1.5		01 15	01 53	B

Dome Temp. +030F 75%

Focus 98R

Dome Temp. 0°F 90%

Transparency Conditions cirrus clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h 10m E	+44° 55'		5.79	gG5	15-15-15	Sp Bi - Bld	400/160		fair
0h 01 W	+10° 30'		6.55	B9	15-15-15	" "	400/140		fair
0m 37 W	+19° 50'		6.56	F8	15-15-15	" "	400/160		fair
0h 30 W	+25° 09'	3	8.86	G2 II	15 15 15	SSV	800/210		fair
0h 26 W	+27° 44	3	8.40	K3 III	15-15-15	SSV	800/210	double exposure 5 arcmin on from plate 37912	fair
			Dev	9 min	@ 68°F	MV 72			fog 24
3m 0 W	+15° 10		7.7	B3e	15-15-15	Sp Bi - Bld	800/280		fair
2m 35 W	+07° 27'		3.82	B9 II p	15-15-15	Sp Bi - Bl	80/24		fair
0h 10 E	+10° 43'		5.29	A2 I	15/15-15	" "	400/140	cirrus too thick so give up	fair

Date Feb 7-8 GLR THUR/FRI Observer GLR/[illegible] Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37915	Plane ✓	03 43 3	+23 51	40c	IIaF	9 1/2	20	18:21	18:50	A
37917	sol Stp wedge				"	92 sec				
37916	HD 37479	05h 37m 7	-02° 39'	"	"	13 1/2		19:04	19:57	A
	IC Photometry							20:00	96:10	

Dome Temp. 9°F 82°F

Transparency Conditions Clear - very good

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20h 04m E	+24 07	2-3"	5.01	B9	15-15-15	GI Shell	200/100		F: thn
								Dev 9min @ 68°F mwfd	fg .25
19h 52m E	-02 03'	3-4	6.71	B5	15-15-15	"	400/140		F. thg

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Date Feb 8/9 FRIDAY Observer HAYNES-RAK Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37917	HD42545	6h04.3	+16° 09'	G-12	IIaO	9/.5	7°F	00;48	01'22	A
37917 T.	cool star comp				"	90xc				

Dome Temp. 7° F

Transparency Conditions Clear after 0h5 for about 30 min only! Very heavy cloud after that

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4h 03m W	+16° 27'	5-6"	4.72	OSI		Spl in Pl.	8 of 20	into mittent cloud over desktop!!	Excl
								Des 9 mi @ 65° F MWP2	Fg. 3?

Date 9/10 Feb 54/55 **Observer** R.L. McFadden **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37918	HD 24760	$03^h 51.^m1$	+39° 43'	61"	IIa-J	9/1.7	20°	20:20	20:42	A
37918T1	cal. step wedge for 37918				IIa-J	6 min				
37919	HD 24912	$03^h 52.^m5$	+35° 30'	"	"	13/1.7	"	20:52	21:31	B
37920	HD 28363	$04^h 23.^m3$	+15° 57'	"	IIaob	9/1.5	"	21:41	22:45	C
37921	HD 41161	$05^h 58.2$	+48° 15"	"	IIaOb	13/1.5	"	22:55	23:12	A
37921T1	cal. step wedge for 37919, 22, 23				IIa-J	6 min				
37921T2	" "	" "	37920-21		IIaOb					
37922	HD 39462	$05^h 09.^m2$	+02° 44'	"	"	9/1.5	16°	01:00	01:27	B
37923	HD 43702	$10^h 47.^m7$	+10° 42'	"	"	13/1.5	"	01:36	03:37	C

Dome Temp. 9°F 84°H

Transparency Conditions Cloud fill 20:00

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h47mW	+40° 00'	3"	2.71	B2.5I	3-3-3	B/n Sp B	40/150		sl. stray
								Dew. 9mm @ 63°F MWP2	Eg .14
02h35mW	+35° 47'	3-4"	4.04	07	3-3-3	"	40/140		sl. stray
03h20mW	+16° 10'	1-2"	7.14	F8	f:14m 15-15-15	"	400/100	some cloud	fine
04h15mW	+48° 17'	3"	6.51	B0	15-15-15	"	400/75	over the top please cloud from S.W.	sl. stray
								Dew 9mm @ 63°F MWP2	Eg .13
								" " "	Eg .20
01h[illegible]mW	+02° 27'	3-4"	3.82	B9.5Ip	3-3-3	"	40/90	around moon cleared up again; fine	fine
21h51mW	+10° 45'	3-4"	5.29	A2I	3-3-	"	200/580	more cloud; seems lowering; closed up	fine

Date Feb 13-14 1924 Observer CH-R Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37424	+10.2847	04 42.2	+10 18	6-12	Flat			05.09		

Dome
Focus
Dome

Hour
End

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								closed up	

Date 14/15 FEB THUR/FRI 1974 **Observer** Gl-Ri/Sanders-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37924	HD 11291	$01^h 45.8$	$+50° 18'$	G12	IIa-0b	13/.5	15°F	18:31	18:55	A
37925	HD 21364	$03^h 21.6$	$+09° 23'$	"	IIIa-J	13/.5		19:03	19:38	B
37926	HD 23862	$03^h 43.3$	$+23° 51'$	"	IIIa-J	13/.5		19:40	21:48	C
37927	HD 37479	$05^h 33.7$	$-02° 39'$	"	IIa-0b	13/.5		21:56	23:00	A
37927T1	cal step wedge to plates 37925,26,32-35				IIIaJ	6 min				
37927T2	cal step wedge to plates 37924,				IIa 0B	90 sec				
37927T3	cal step wedge to plates 37927-31				IIa 0B	90 sec				
~~37928~~	~~HD 54418~~	~~06h 52.3~~	~~+42° 26~~	~~G12~~	~~IIa 0B~~	~~13/.5~~		~~23 08~~		~~B~~
37928	HD 79469	$09^h 09.2$	$+02° 44'$	G12	IIa-0b	9/.7	12°F	23:32	23:45	C
37929	HD 93702	$10^h 48.0$	$+11° 04'$	"	"	13/.7		00:05	00:42	B
37930	HD 99946	$11^h 29.8'$	$+30° 32'$	"	IIa-0b	13/.5		01:00	01:49	C
37931	HD 109451	$12^h 56.6$	$+30° 06'$	"	IIa-0b	18/.3		02:03	03:38	A
37932	HD 110411	$12^h 36.8$	$+10° 47'$	"	IIIa-j	13/.5		03:43	04:41	B
37933	HD 130841	$14^h 49.2'$	$-15° 38'$	"	IIIa-j	13/.7		04:47	05:03	C
37934	HD 136179	$15^h 41.2'$	$-3° 17'$		IIa-j	13/.7	9°F	05:10	05:40	A
37935	HD 141653	$15^h 48.4'$	$-3° 17'$	"	IIIa-j	13/.7		05:47	06:15	B

Dome Temp. 05°F 64%

Focus 85 R

Dome Temp. 0°E 76%

Transparency Conditions cirrus clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02"25 W	+50° 43'	3-4"	5.62	B9 III	15-15-15	Hd Sp Bin	400/140	heavy cirrus	Fair
01h 33m W	+09° 40'	3-4"	3.66	B8p	3-3-3	Bln Sp Bin	40/110	13 counts at 9.7 ; too low	Fair
03h 22m W	-24° 07	2-4"	5.1m	B9	3-3-3	Gl Shell	200/600	cirrus breaking up	Fair
02" 45 W	-02° 32'	3-4"	6.71m	B3V	15-15-15	rG * Bln	400/140	increasing cloud	Fair
								Dew 9mi @ 65°F MWP2	Poor .10
								" " "	Fair .20
								" " "	Fair .20
								too faint!	
04 07 E	+02° 30'	4"	3.82	B9.5Ip	15-15-15	Bln Sp Bin	80/35		Fair
04 45 E	+10° 45'		5.29	A2II	15-15-15	"	400/200		Fair
04 19 E	+13° 31'		6.34-7.05	FOF2	15-15-15	Bln Sp Bin	400/160	#29	Fair
01 00 W	+29° 43'		8.7	gF3	15-15-15	Bln Sp Bin	800/240		Fair
1" 23 W	10° 24'		4.97	A1V	3-3-3	Bln Sp Bin	40/115		Fair
00" 24 E	-15° 56'		2.09	Am	3-3-3	Bln Sp Bin	40/140		Fair
00° 17 W	2° 01'		3.74	A0V	3-3-3	Bln Sp Bin	40/146		Fair
01 12 E	-3° 30'		3.50	A1V	3-3-	Bln Sp Bin	40/150		Fair

Date 15/16 Feb FRI/SAT 74 Observer IT-RL/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37936	HD29139	4h30.2	16°18'	G12	IIaj	13/1.9	16°F	18h42	19h07	A
37937	HD48329	6h37.8	25°14'	"	"	13/1.3		19.13	19:47	B
37938	HD58207	7h19.5	28°00	"	"	13/1.9	18°F	19h56	21:04	C
37938T	cal stars wedge				IIaj					
	18 Photometry							21:30	01:00	
37939	HD93702	10h44m0	11°04'	G12	IIaO	9/1.5		01:25	02:15	A

Dome Temp. 10°F 50%

Focus 85 R

Dome Temp. 80°F 87%

Transparency Conditions good wind hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
04 04E	16° 31'	2	2.39	K5III	3-3-3	Ir - Giant	20/500		1.53	fair
01 30E	25° 13'	1 1/2	~4	G8Ib	3-3-3	"	20/133		1.40	fair
00 55E	27° 54'	1	4.78	G9III	3-3-3	"	40/660		0.99	fair
								Dew 9pm @ 63°F		Q. II
03 55W	10° 44'		5.09	K2V	15-15-11	Sp Ir B2	20/70	cloud & hazy		fair

Time S.T. P.H.

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Date 17/18 Feb Sun/Mon Observer Ir-Hms Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	IR Photometry			7-7.55		PM EST				
				cloudy after		8:30				
	TELESCOPE			DOWN						
			DEC		SLEW		DRIVE			
			FAILED							
	LEFT TO FIX TOMORROW.			: 9:45						
	ATTN - FRANK				HUNKER					

2nd Half LOST which was photometric

Dome Temp. 15°

Focus .....

Dome Temp. .....

Transparency Conditions ..... clear
clouds in west

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

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Date Thurs Wed Feb 20-21 1974 Observer Mas Bh-Di Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37940	4D 21364	03h21.8'	+05°23'	C-12	IIIa J	13/.7	33°F	20 :19	20:37	A
37940 71	cal stop wedge				IIIa J	6 min				
	12	Photometry						20:50	03:45	

Dome Temp. 20°F 84%

Focus 60 R

Dome Temp. 18°F 82%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0z 36W	+09° 42'	5	3.66	B8p	33-3	Fo Bi - Ph	40/150		fine
								Dw 9sm @ 697 mb WP2	

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Date Sat Sun Feb 23/24 1974 Observer Has Tollestrup-R2/Has-R1 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37941	HD 32092	04h 55.6	+26° 32	C-12	IIa O-B	13/.5	22°F	18 ;41	19: 29	A
	IR	Photometry						19 : 45	05: 50	

Dome Temp. 120F 63%

Focus 75R

Dome Temp. 95°F 74%

Transparency Conditions very good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0^h 2' W	+26° 40'	5.3	7.28	F5	15-13-15	Waterloo Var. Bin	40/160		fair

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Date Sun Mon Feb 24/25 1924 Observer Saunder R/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37942	HD 21364	3h 21.8	9° 23'	G12	III a-j	13/1.7	18°F	18.43	19.32	A
37943	HD 24760	3h 51.1	39° 43'	G12	III a-j	91.7	"	19:37	20:18	B
37944	HD 42560	6h 06.3	14° 14'	G12	II					
37945	HD 45542	6h 23.0	26° 17'	G12	II aob	13/9	"	20:35		
37946 37947	and 2hrs work				III aj	6mi				

Dome Temp. 8°F 67%

Transparency Conditions hazy

Focus 50R

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h06W	9° 41'		3.66	B8p	3-3-3	Sp Bin-Var	40/150		fine
2h21W	39° 59'		2.71	B0.5I	3-3-3	Sp Bin-Var	40/150	clouds from S.W.	stray
	14° 1		4.18	B3V		Sp Bin-Var			
	20° 15'		4.04	B7IVe	15-	Sp Var Bin			
								Dew 9mi @ 69°F m WP2	

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Date Mon Jun 25/26 1974 Observer Hms-Ri-CM Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	IR	Photometry						19:10	20:32	
37944	HD 31867	04 54.2	+25 10	G12	IIaO B	13/-3	15K	21:30	23:10	A
	IR	Photometry						23:30	09:20	
37945	HD 141458	15h 44.1	+13° 01	G12	IIaO B	13/.5		04:55	05:45	A
37945	Dark sky work	15h 19			IIaO B	90 sec				

Dome Temp. 090°F 69%
Focus 80 R
Dome Temp. 01°F 85%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
09h17m W	+25°10'	—	8.86	G2V	15-15-15	S S V	800/0.10		fair
								cloud coming up fast from SW'W	
04h05m W	+12°50		6.80	A0	15-30	Sp Bw - Bb	400/7.5	thru cloud	
	Step wedge overdev. by mistake				12 min	MWP2 @ 6.80		clouds out	
								overdev. step please	
					17				
					18				

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Date Tues Wed 26-27 1974 Observer Hns-Ri-Cm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	IR	Photometry						19:15	21:30	
37946	HD 22208	03h 26.5	+40° 09	G-12	I-300	13/1.5	35°F	23:12	00:12	A
37947	HD 79467	09h 09.2	+2° 44	G-12	II-90V	13/1.9		00:17	00:24	B
37948	HD 99945	11h 21.3	+30° 32'	G-12	I-300	13/1.5		00:55	1:11	C
37949	HD 110411	12h 35	10°	G-12	IIIaJ	13/1.5		1:45	2:55	D
37949T1	calibration wedge				IIIaJ	6 min				
37949T2	calibration wedge				IIIa 103	90 sec.				
37950	HD 130109	14h 41.2	-2° 19'	G-12	IIIaJ	14/1.5		03:02	03:37	H
37951	HD 144911	16h 45.4	-15° 08'	G-12	IIaJ	13/1.9		03:43	04:07	G
37952	HD 144518	16h 44.1	+13 01' Th	G-12	IIIaJ	14/1.5		04:12	04:37	A
37953	HD 154204	16h 47.0	+30° 44'	G-12	IIIaJ-S	13/1.6	35°F	04:41	05:12	B
37954	HD 173740	18h 40	+75 34 Th	G-12	I-300-B	13/1.5		05:40	06:08	C
			+75 34 Th							

Dome Temp. 12°F 75%

Focus 10°R

Dome Temp. 15°F 93%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 45W	+09°55		6.58	AO	15-15-15	Spbun-Hd	400/120	Hazy	Fair
01 20W					15-15-15		40/35	Hazy	Guiding Fair
00 IN	+30° 09'	23			15-15		400/140		Fair
00°25W	+10				3-3-3		40/115		Fair
								Dev 9 ms @ 69° NW#2	
								" " "	
01 09E	+09°04	2	2.71	AO	3-3-3	Spbun-Blu	30/210		Fair
0°34E	SAS A90 +13° 53	2	2.89	Pm	3-3-3	Sp blu-Blu	F0/300	Yes Hr < end = 0 31E T=190	SE wk
01 29E	+12° 51	2	6.30	AO	15-15-15	Sp Bin Blu	400/120		Fair
01 29E	+32°38	2	6.26	KO III	15-15-15	Sp Bin Hd	400/200		Fair
00°38E	+75°28'	2	6.84	F0	15-15-15	Sp Bin Hd	400/160	Hazy again	Fair

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* baked 2/26/73

Date Feb 27/28 1974 Wed/Thu **Observer** BA-RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37955	HD 21364	03h 21.8m	+09° 23'	G-12	IIIaJ	13/17	33°F	19:43	20:27	H
37956	HD 24760	03h 51m.1	+39° 40'	G-12	IIIa-J	13/17		20:30	20:40	13
37957	HD 25632	03h 54m.0	+6° 03'	G-12	IIa-Ob*	13/15		20:43	22:14	G
	~~HD 25954~~	~~04h 23m.0~~	~~+20° 17'~~		~~IIIa-J~~	13/15		22:19		H
37958	cal stp wedge				IIIaJ		6 min			
37959	cal stp wedge				IIa0 13		90 sec			

Dome Temp. 22° F 84%

Transparency Conditions Crummy

Focus 55 R

Dome Temp. 22° F 87%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 14 W	+9° 43'	2-3	3.66	B8p	3-3-3	Sp Bin Blu	40/150		
02 55 W	+39° 59	2-3	2.71	B0.5V	3-3-3	Sp. Bin - Blu	40/144		
04 "20 W	+62° 19'	2-3	7.38	B0	1.5-1.5+5	Sp. Bin - Blu	400/130		
			4.04	B3IIIe	3	~~Sp. Bin Blu~~	~~80~~		

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+ Vacuum

Date 1974 Mar 1-2 Fri-Sat Observer Fr-Th Julian Day

Plate No.	Object	R.A. 1900 1974	Declination 1900 1974	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37958	Moon	04 56	+23 16	G12	IIIaj*	9/·9	18°F	22:10	22:45	A
37958T	Calstrip	-edge	6 min		"					

Dome Temp. 28° H: 88°

Transparency Conditions Bad

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4 08 W	+23° 16'			G	3-G	Ir-Giant	20/46	very thick	

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Date March 5/6 Tues-Wed Observer Cx.-Tm./Tu.-Hns. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
37959	HD 21364	03h 21m8	+09° 23'	G-12	IIIa-j	13/1.7	42°F	18 55	19 : 22		02 35
37960	HD 24760	03 51.1	+39 43	"	"	9/1.7		19 57	20 ' 13	E	02 53
37960 T1	Cal step	wedge	6 min		"			30 : 39			
37961	HD 31867	04 54.2	+25 00	G12	IIIa0-6	13/4		20:21	23:05	A	04 45
37961 T1	Cal step	wedge	90 sec		"						
	E.R. Photometry							23:15 → 23:45			
37962	HD 72208	08 365	+10 09	G12	[illegible]	13/1.5	40°	23:47	00:46	E	1:35
37963	HD 104451	11 56.6	+30 06	"	"	13/1.4		00:56	04:01	C	
37964	HD 164528	17 00.9	+77 43	G-12	IIIa0-6	13/1.5		04 07	07 14	A	
37964T	Cal step	wedge	90 sec	G	"	[illegible]	[illegible]	37963			
37965	HD 180109	19 01.2	+2° 19'	G-12	IIIaj	13/1.7		06 23	06:11		

Dome Temp. 40° H=73%
Focus Changed from 55R - 45R
Dome Temp. 37° H=83%

Transparency Conditions clear - thin haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 33W	+9 42	3	3.66	B8p	3-3-3	Spbin-Hd	40/150		
02 53W	+40 01	"	2.71	B0.5V	3-3-3	"	40/141		
04 42W	+25 11	"	8.86	G2V	15-15-15	spbin-Hd	800/200		
-	no helium								
02 53W	+9 56	3-4	6.58	HD	15-15-15	SpBin-Hd	400/150	Fld drown - 3	
02 32W	+29 43	3-4	8.7	F3	15-15-10	Spbin-Hd	800/182	seeing deteriorating *OVER DEVELOP	
06 5	+77 42	"	6.66	AO	15-15-15	spbin-Hd	400/143		
03W	+2 09	"	3.74	A0V	3-3-3	Spbin-Hd	200/630	some cloud	
				4	16			*Hd# = 37935 37936 AT	
								right of Box	

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Date March 7/8 THUR-FRI 1974 **Observer** GL-TA/TA **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37964	HD 23262 ✓	$03^h 43^m 3$	+21° 51'	G12	IIIa-J	13/.5	47°	19:04	21:51	C
37965	Col step wedge			"	"			58:47	3	
37967	HD 51418	$06^h 52^m 2$	+42° 26'	"	IIIa-J	9/.5		21:56	23:10	B
37967T	Col step wedge		90 sec		"					
37968	HD 110411	12 36.8	+10 47	G12	IIIa-J	13/.5	38°	01'42	03:37	C
37969	HD 130841	14 45.4	-15 38	"	"	13/.7		03'40	04'12	A
37970	HD 130109	14 41.2	+2 19	"	"	13/.7		04'15	05:25	C

Dome Temp. 38°F / 54% H

Focus from 45 → 35-R → 50R

Dome Temp. 26° H=72%

Transparency Conditions very good — Haze & cloud at times

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h47mW	+24 08	4-5"	5m1	B8p	3-3-3	Gl Shell	200/600		
02h57mW	+42° 25'	"	6.61	90p	15-15-15	Gl Ap	400/115	some cloud — double star	
01 41W	+10 26'	3-4"	4.97	A:V	3-3-3	Spkm-Em	200/590	Focus 50-R	
00 07W	-15 52	"	2.89	Am	3-3-3	"	40/150	cloud	
01 25W	+ 2 03	"	3.74	A0V	3-3-3	"	40/135	" cirrus	

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* not in vacuum for 2 days

Date Mar 10-11 Sun-Mon **Observer** Tn-Saunders / Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37970F	Focus Test			G12	IIIaO	13	32°F			B
37971	HD24760	03 51.1	+39° 43	G12	IIIaJ*	9/1.7		18:58	19:14	A
37972	HD 21364	03 21.8	+9 23	"	"	"		19:18	20:19	B
37972T	Col step	wedge	6min		"			20:33	20:38	
37973	HD 24363	04 23.3	+15 57	G12	IIaO-6*	9/1.4		20:23	22:10	C
37973T	Col step	wedge	90sec		"					
37974	HD99946	11 24.8'	30° 12'	G12	IIIaOb*	17/1.4		22:16	22:46	A
37975	HD 104451	11 56.6'	30°06'	G12	IIIaOb*	"		22:51	00:57	B
37976	HD 99946	11 24.8	30 32	"	"	"		01:08	01:41	C
37977	HD 110411	12 36.8	+10 47	"	IIIaJ*	13/1.5	27°	01:45	02:47	A
37978	HD 130841	14 9.4	-1° 56	"	"	13/1.7		02:52	03:17	C
37979	HD 130109	14 9.2	+2 19	"	"	"		03:20	03:57	A
37980	HD 137569	15 21.7	+15 03	"	IIaO-6*	13/1.4		04:03	05:29	B

Dome Temp. 26° H 62%

Focus Changed from 50 - 60

Dome Temp. 20° H = 88%

Transparency Conditions Very Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					5/5	no G. Her	60 sec		
02 13W	+39 58	2"-3"	2.71	B0.5V	3-3-3	Sp Bin. Pla	40/140	ε Per	
03 49W	+40 42'	"	3.66	B8p	3-3-3	"	40/150	χ, Tau	
04 38W	+16° 09'	2"-4'	7.14	F8	15-15-15	"	400/140		
01 48E	+30 07'	"	6.84 7.9	F0, F2	15-15-15	"	400/122		
00 07E	+29 44	"	8.7	gF3	15-15-15	"	800/280		
01 08W	+30 08	"	6.8 - 7.1	F0, F2	15-15-15	"	400/130	Set Time reset was 1.5 min fast	
01 03W	+10 35	"	4.47	A1V	3-3-3	"	40/130		
00 35E	-15 52	2"-3'	2.89	Am	3-3-3	"	40/150	Some cloud	
00 09W	+2 03	"	3.74	A0V	3-3-3	"	40/150		
01 01W	+14 51	"	7.7	G7	15-15-15	"	800/260	Field blown? thin cloud? very faint?	

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*sep batch of III a-j

Date March 12/13 Tues-Wed **Observer** Tn · Am / Ms -Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37981	HD 21364	3h 21m 8	+9° 23'	G-12	III a-j*	9/1.7	26°F	19:00	19:46	C
37982	HD 21760	3h 50m 1	+39° 48'	G-12	III a-j	9/1.7		19:55	20:12	C
	Group located at Saturn							—	20:18	
	IP Phot	Hrs						20:19	9:30	
37983	HD130109	14 41.2	+2 19	G12	III aJ	13/1.7		04:50	05:42	C
37983T	Cal step	wedge	6min		"			7 23	13 2	

Dome Temp. 20°F 50%

Focus clear at 65-K

Dome Temp. +7°F 53%

Transparency Conditions clear - Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 49W	+9 42	2"	3.66	B8p	3/3/3	Bin - Bin	40/140	Last of Lat batch HA = 25h	
03 20W	+39 59	2"-3"	2.71	B0.5V	3/3/3	"	400/140	new batch	
02 02W	+2 02	3-4"	3.74	A0V	3-3-3	Spb - Bin	40/150	very windy	

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Date Wed-Thurs Mar 13-14 1974 **Observer** Bln-Ri-Hng/Bln-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37984	HD 24760	03 51.1	+39°43	G-12	IIIaJ	9/1.7	24°F	19:02	19:14	A
37985	HD 21364	03 21.8	+09°39	G-12	IIIaJ	13/1.5		19 18	19:37	B
		1R Photometer						20.00	00:10	
37986	HD 99946	11h 24.8	+30°32	G-12	IIaO	13/1.5		00 23	01 15	C
37987	HD 104451	12h 56.6	+30°06	G-12	IIaO	25/1.3		01 20	02:58	D
37987T1	cal step wedge				IIIaJ	6 min				
37987T2	cal step wedge				IIaO	90 sec				
37988	HD 110411	12h 36m.8	+10° 17'	G-12	IIIaJ	9/1.7		03:02	03:45	E
37989	HD 130109	14h 41m.2	+2° 19'	G-12	IIIaJ	13/1.7		03:51	04:11	C
37990	HD 135511	15h 44m.4	-15° 38'	G-12	IIIaJ	9/1.7		04:14	04:33	M
37991	HD 141513	15h 44m.4	-03° 07'	G-12	IIIaJ	9/1.7		04:37	05:04	B
37992	HD 141458	15h 44m.1	+13° 01'	G-12	IIaO	13/1.5		05:07	05:37	C
37993	Alpha CBr	15h 33m.4 (1900)	+26° 49' (1900)	G-12	IIIaJ	9/1.9	22°F	05:40	05:50	A

Dome Temp. 14°F 61%

Focus 65° R

Dome Temp. 9°F H=57%

Transparency Conditions Super b

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 25m W	+40° 00	3	2.71	B0.5V	3-3-3	Sp Bu-Bl	40/144		
00h 20m W	+09° 43	3	3.66	B8p	3-3-3	Sp Bu-Bl	40/100		
00h 55m W	+30° 09'	2-20	6.84 709	F0 F2	15-15-15	Sp Bu-Bl	400/1[illegible]0	FOCUS 70 R	
00h 06m W	+29° 44'	2-10	5.7	F3	15-[illegible]	Sp Bu-Bl	800/260		
								Dew 9min @ 68°F MWP2	
								" " "	
00h 15m W	+10° 25'	2-3	4.97	A5II	3-3-3	Sp. Bu-Bl	40/110		
00h 03m W	+02° 03'		3.74	A0V	3-3-3	Sp. Bu-Bl	40/144		
00h 54m W	-15° 52		2.89	A3III	3-3-3	Sp. Bu-Bl	40/140		
00h [illegible]m W	-2° 18'		3.50	A0V	3-3-3	Sp Bu-Bl	40/140		
00h 58m W	+12° 52		6.80	A2	15-15-15	Sp. Bu-Bl	400/120		
01h 25m W	+26° 52'		2.23V	A0V	3-3-3	Bint Str	40/171		

Date THURS - FRI MAR 14-15 1974 **Observer** GI-RI/BH-RI **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
37994	HD 23860	$03^h 43^m.3$	+23°51	G12	IIIa J	13/5	28°F	19:10	20:28	A
37995	HD 51418	$06^h 58^m.2$	+46°26'	"	IIIa J	9/5		20:34	21:14	B
37996	HD 79469	$09^h 09^m.2$	+02°44'	"	IIIa J	13/7		21:19	2:[illegible]	C
37997	HD 87504	$10^h 00^m.3$	−12°35'	"	"	13/5		21:48	[illegible]	A
		IR	Photometry					23:00	23:15	
37998	HD 99948	[illegible]	[illegible]	"	IIIa J	13/5		23:22	00:26	B
37999	mierak B U Ma	1970 11 00 0	1970 +56 33	"	IIIa J	9/9		00:32	01:16	C
37999T1	cal step wedge				IIIa J	6 cm				
37999T2	cal step wedge				IIIa OB	90 cm				
38000	α U Ma AB	$11^h 01.9$	+61 55	"	IIIa OB	9/9		01.20	01 32	A
	ψ U Ma	$11^h 05.0$	+44:39	"	IIIa OB	9/9		01:35		B

Dome Temp. 14°F 55% H

Transparency Conditions cirrus + hazy

Focus 65R

Dome Temp. 10°F 56%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03h52mW	+24°07'	2-3	5.1	B8p	3-3-3	G1 Shell	200/200		
01h28mW	+42° 24'	"	6.61	A0p	15-15-15	G1 Ap	40/140		
00h00mE	+02°28'	3"	3.82	B9.5Ep	3-3-3	Bin Sp Bin	40/143		
23h12mE	−12° 55'	3-4"	4.51	B8IVE	3-3-3	" " "	40/105	Loaded but ... for box type: for narrow	
	to hazy								
00h10mW	+30° 10'		6.84v	F0+F2	15-15-15	Bin Sp Bin	40/130		
01h28mW	+56° 33'	1-2	2.34	A1IV	3-3-3	B,S,L+ Std	40/180	cloudy	
								Dew 9 min @ 68° MWD 2	
								" " "	
01h40mW	+61° 56		2.82	K0III	15-15-15	B,S,L+ Std	40/36		
	+44° 40'		4.14	K1III	15		42/	cloudy	

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Date Sun Mon Mar 17/18 Observer R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38001	HD 130109	14h 41.2	+12° 19'	G-12	IIIaJ	13/1.5	28°F	03.51	03:30	A
38002	HD 130841	14 45.4	-15° 35'	G-12	IIaJ	13/1.7		03.35	03:58	B
38003	HD 141513	15h 44.4	-03° 07	G-12	IIIaJ	13/1.7		04:03	04:33	C
38004	HD 141458	15h 44.1	+13° 01	G-12	IIaO	13/1.5		04:37	05:22	F
38004.1	cal alys wedge				IIIaJ	6 min				
38004.2	cal alys wedge				IIaO	90 sec				
38005	5 Oph	1900 16h 35.5'	1900 -10° 30	G-12	IIIaJ	9/9	26°F	05.27	05.54	B

Dome Temp. 15°F 64%

Focus 65 R

Dome Temp. 14°F 64%

Transparency Conditions Cirrus in and and very high winds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h10W	+02°01	5-6	374	A0V	3-3-3	Sp Bri Blu	40/110		
00h34W	-15°53		289	Am	3-3-3	Sp Bri Blu	40/140		
00h08W	-03°17'		350	A0V	3-3-3	Sp Bri Blu	40/140		
00h59W	+12°51	4'	680	A0	15-15-15	Sp Bri Blu	40s/120		
								Dew 9mi @ 69°F mwP2	
								" " "	
23h44W			242	O9.5V	3-3-3	Bright Std	40/120		

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Date Tues Wed Mar 19/Mar 1974 **Observer** CM-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38006	HD 53755	07h 01.7	−10° 30′	G-12	IIaO-b	13/.5	34°F	21:13	[illegible]	A
38007	HD [illegible]	11h 24.8	+30° 12′	G-12	IIaO-b	13/.5	30°F	01:09	02:06	B
38008	HD 110411	12h [illegible]	+0° 41′	G-12	IIaO	13/.5		02:18	[illegible]	C
38009	HD 130551	14h 45.1	−15° 38′	G-12	IIaO	13/.7		03:05	03:45	D
38010	HD 152224	16h [illegible]	+32° [illegible]	G-12	IIaO	13/.5		[illegible]	[illegible]	E
38010T1	cal step wedge				IIaO	6 min				
38010T2	cal step wedge				IIaO	90 sec				
38011	HD 154523	17h 09.9	+77 43	G-12	IIaO-b	13/.5		04:51	05:30	C
38012	η Lyr A	18h 23.8 (1970)	+39° 39′	G-12	IIaO-b	13/.7		05:39	[illegible]	F

Dome Temp. 20°F 70%

Focus 55 R

Dome Temp. 18°F 86%

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21" W	−10° 34'	4-5	6.33	B3	15/15/15	Sp cen-Hd	40/111	clouds at 21:45	
10 W	+30° 10'	2-3	6.61	F0 V	1-3/15-15	Sp bin-Bin	40/160	changed focus to 60 R	
	+10° 2'		−.12	A2 V	3/3/3	Sp cen Bin	40/110		
00h 25 W	−15° 51'		2.89	AM	3/3-3	Sp bin-Bin	20/140		
40" 39 E	+32° 7.9'	2-3	5.26	K0 III	3/15/15	Sp bin Hd	40/200		
								Dew 9 min @ 69°F mw 12	
								" " "	
00h 05 W	+77° 43'		6.66	A1	15/15-15	Sp bin-Hd	400/120		
	+61° 35		3.63	G5 III	3/15	Bright Std	200/100		

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Date Wed-Thurs Mar 20-21 /74 **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38013	HD37479	05h 33m.7	-2° 39′	G12	IIa0-6		30°	19:09		A

Dome T
Focus
Dome T
Hour Angl
End

150

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... very bad .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			6.32	B3p	15	Sp. Bin - Blu		WORSE!	

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Date THURS. FRI MAR 21/22 1974 **Observer** Gal-Tn/Tu-Hus **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38012	HD 23262 ✓	03h 43m 3	+23° 51'	G12	IIIa-J	13/.5	30°	19:16	21:16	A
38013 T	Cal stop wedge	4 min for 38013			"					
38014	ND 61418	06 52.2	-12 26	G12	IIa O-6	9/.5		21:21	22:23	B
38014 T	Cal stop	wedges	90 sec		"					
38015	HD 99746	11 24.8	+30 32	G12	"	17/.4		22:28	23:31	C
38016	HD 137569	15 21.7	+15 03	"	"	13/.4		23:36	01:47	B
~~38017~~	~~HD +30109~~	~~14h 41.2~~	~~-2° 19'~~	~~"~~	~~IIIaJ~~	~~13/.7~~		~~03:02~~		
	Some IR Phot done							02h—	03h	

Dome Temp. 25°F / 86% H

Focus .....

Dome Temp. 220 / 84 %

Transparency Conditions Excellent [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5 08 W	+24 08	3"-5"	5.1	B8P	33-3	G1 Shell	200/350	OVERDEVELOP PLEASE! interrupted for [illegible]	
	for plate	38013						Dew 7mi @ 65°F MWP2	
3 05 W	+42 24	2"-3"	6.61	$A0_p$	15-15-15	G1-Ap	400/140		
								Dew 7mi @69°F MWP2	
00h49E	+30° 09'	2"-4"	6.84-7.09	F2a F2	15-15-13	5p B_{10}-B_{16}	400/136		
09h49E	+14 49	"	7.9	B5	15-14-15	"	400/115	Clouds some [illegible] ?	
	+2°							clouds closed	

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* In vacuum again

Date Sun-Mon Nov 24-25 / 74 **Observer** Klemola-Tan-Hans **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38017	HD 37479	05 33.7	-2 39	G12	IIaO-b*	13/1.5	22°	19:19	20:49	E
38017T	Cal step	wedge	93 cm		"					
38018	α GEM AB	07 32.7 m	+31 57 s	G12	IIaJ	9/.9	19°	21:01	21:17	C
	IR photometry						1.	22h: →	05h	
38019	POLARIS	15 44.1	+13 01	G12	IIaO-b*	13/1.5	9°	04:55	05:37	E
38019F1	Focus Test		set 95-R	G12		13				E

Dome Temp. 10° 70%
Focus changed to 75-R → 95-R
Dome Temp +2° 89%

Transparency Conditions Good but very gusty

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03:05W	-2 33	10-15/5	6.32	B3p	15-15-15	Sp Bin-Bin	400/140	some cloud	fine
								Dew 6 min @ 69°F MCWP2	
01:35W		3-7	2+3	A1+ A5m	3-3-3		40/145		S. string
01:42W	+12 51	2-3	6.30	A0	15-12-15	Sp Bin-Bin	400/85	set 95-R	fine
	moved				5/5	no filter			ok

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Tues - Wed

Date March 26/27 **Observer** Th - Cm / Hes - Tq **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38030	σ Ori AB	5h 33.1	-2° 39'	G	IIaO-6	B3/1.5	30°	19:20	19'37	A
38031	HD 37479 σ Ori E	" "	" "	"	"	"		19:39	21:13	B
38021 T	Corrdo				"					
	IR Phot							21:30 →	01'30	
~~38022~~	~~π Hercules~~	~~1903 17h 40.2~~	~~+36° 39'~~	~~G~~	~~IIaO-6~~	~~B3/1.5~~	~~21°~~	~~01:30~~		

Dome Temp. 21°F 70%

Transparency Conditions Some cloud ... Hazy

Focus Changed 95-P- 65-R

Dome Temp. 14° H. 87%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
37		01 58W	-2° 33'	2.3	40		15-15-15		200/60		
13		03 35W	"	"	632	B3p	13-16-15	"	400/125		
10											
—		~~1 36 50~~		~~3~~	~~4 6~~	~~K3 II~~	~~15-~~	~~Prog~~	~~10/~~	set 75-R Cloud	

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Date Mar 27/28 Wed. Thur 74 **Observer** R.L.-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38022	HD 37479	05 33.7	-2 39	G12	IIaO-b	13/.5	31°	19:20	20:37	A
38022 T	Calstar	"	"		"					
38023	σ Ori AB	05 33.7	-2 39	"	IIIaJ	13/.3		20:39	21:10	C
38024	HD 109451	11 56.6	+30 06	"	IIaO6	20/.3		21:45	23:06	B
38024 T	Calstar 4 min				IIIaJ					
38025	HD 99946	11 24.8	+30 32	"	IIaO-b	13/.5		23:11	23:56	C
38026	HD 141458	15 49.1	+13 01	"	"			00:02	00:50	B

Dome Temp. 28° H=60%

Focus 60-R

Dome Temp. .....

Transparency Conditions Bad, but hanging in.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 02 W	-2 33	2"	6.32	B3p	15-15-15	Sp Bin-Bl	400/130		
335W	-2 32	2"	VF 4.0	"	5-5-5	"	40/81		
051E	+29° 44'	1-2'	8.7	gF3	15-15-15	Sp. Bin-Bl	800/240		
030W	+30 09	2"	6.8 7.09	F0+ F2	15-15-15	"	400/160		
02 54 E	+12 50	2	6.10	A0	15-15-15	"	400/84	OVER DEVELOP	
Someone doesn't Know East from west.									
Ah! Your grandmother wears combat boots!									

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Date Apr 4/5 THUR/FRI 74 **Observer** GL-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38027	HD 23863	$03^h 43.3$	+23° 51	G12	IIa-D	13/.5	58°F	19:35		

Dome Temp. 41°F 73% H (Pier)

Focus 30R

Dome Temp. .....

Transparency Conditions Intermittent cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	+24° 10'	2"	5.1	1:8p	15	G1 Shelt	200f	clouded over	

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Hhs--

Date April 6/7 74 Sat-Sun **Observer** Tn / Mstubbs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38027	9 Ori AB	$05^h 33^m.7$	$-2° 39'$	G-12	IIaO	13/.5	35°	19:31	19:36	A
38028	HD37479	"	"	"	"	13/.4		19:38	20:20	B
	IR Photometry							20:30 →	21:50	
38029	HD 9946	$11^h 24^m.6$	$+30° 32'$	"	IIaO	13/.5		22:12	23:08	C
38029T	Cal step	wedge	90sec		"					
38029T1	Focus Test				"	13	35°F			D
" F2	"				IIaO+GG385	"	"			E
" F3	"				"	"	"			F

Dome Temp. +30° H=55%

Focus .....

Dome Temp. .....

Transparency Conditions Excellent - bit first

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 10W	-	2"	4.0		15-15-15	Spec-Pg	200/70	Cor AB	
3 24W	-2° 33'	2½"	6.82	G3p	15-15-15	"	200/40		
								clouds	
0 22W	+30 08	1"-3"	6.54-7.09	FO+G2	15-15-15	"	400/130	some cloud / clouds	
	no filter				4/4	set 615-R			
					5/5	set 8/0.5			
					5/5	set 41.5			

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Date April 7/19th Sun-Mon **Observer** Saunders/Fm-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39030	110247 60	3h 57.1m	39° 4.3'	G-12	IIIa-j	9/.9	36°	19:31	19:46	A
39031	HD24912	3h 52.5	35° 30'	G-12	IIIa-j	13/.5	"	19:52	20:15	B
39032	HD41161	5h 58.7m	49° 15'	G-12	IIIa-f	13/.5	"	20:20	20:55	C
39033	HD 99946	11h 24m 9	50° 32'	G-12	IIIa-j	13/.4	"	21:01	21:57	A
39034	HD 104451	11h 56m 6	+30° 06'	G-12	IIIa-oh	20/.3	"	22:03	23:52	B
39034T1	cal slip wedge				IIIaj	4min				
39034T2	cal slip wedge				IIIaB	90sec				
39035	HD 110711	12h 46m 8	110° 17'	G-12	IIIa-j	13/.5		23:57	00:35	C
39036	HD 138411	15h 46m 4	-15° 38	G-12	IIIa-j	9/.9		00:39	00:55	A
39037	HD 152224	16h 47m 0	+32° 44'	G-12	IIIaob	13/.5		01:03	01:56	B
39038	HD 163720	17h 56m 3	+46° 34'	G-12	IIIaob	13/.5	37°F	02:04	02:39	C
39039	HD 5811208	17h 10m 9	47° 18'	G-12	IIIaoh	13/.5		02:44	03:52	A
39040	HD 116827	13h 4m 7	+45° 14'	G-12	IIIaoh	13/.5		04:01	04:20	B
39041	HD 184703	19h 48m 3	+3° 07'	G-12	IIIaj	9/.9		04:36	05:02	C

Dome Temp. 21°F 75%

Focus 20 R

Dome Temp. 18°F 70%

Transparency Conditions good

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	4h37'W	34°55'	3"	3.71	Bo.5I	3-3-3	Sp Bu-Bl	40/98		
	B	5h04'W	25°43'	3"	4.04	O7	3-3-3	Sp Bu-Bl	40/52		
	C	3h37'W	48°15'	3"	6.61	B0	15-15-15	Sp Bu-Bl	400/140		
	D	0h47'E	30°03'	"	8.91	B5 F2	15-15-15	Sp Bu-Bl	400/125		
	E	0h37'W	29°43'	3"	8.7	gF3	15-15-15	Sp Bu-Bl	800/240		
			+10°25'		A8	A5I	3-3-3	Sp Bu-Bl	40/90		
		01°17E	-15°53'		2.89	A..	3-3-3	Sp Bu-Bl	40/90		
		22°02E	+33°38'		6.26	K0 III	15-15-15	Sp Bu-Bl	400/200		
		21°[illegible]E	+25°27'		6.84	F0	[illegible]	Sp Bu-Bl	100/160	changed from 658	
		20°20E	+22°42'		6.66	F0	3-15-15	Sp Bu-Bl	400/120		
		0h15E	+13°15'		5.1	K0 III	3-3-15	Sp Bu-Bl	400/120		
		22h03W	-03°17		3.5	A0I	3-3-3	Sp Bu-Bl	40/90		

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Date April 8-9, 1974 Mon Tues **Observer** L-R, W_m-B **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
		1970	1970							
	α Leo II	10 06.8	+12 07	NEW	TRI X			21:15	21:30	
	α Boo	14 14.3	+19°20					22:45		
	"	"	"					22:52		
	"	"	"					22:55		
	"	"	"					22:58		
	"	"	"					23:05		
								00:09		
								00:11		
								00:12		
								00:13		
								00:14		
								00:15		
								00:19		
								00:20		
								00:24		
								00:24:30		

Dome Temp. 68°F/20°F

Transparency Conditions cirrus clouds all over

Focus .....

Dome Temp. .....

Speckle Interferometry 10x enlarger at Newton focus

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mlr.	REMARKS	Quality
			1.25	87II			1/10, 1/25 sec	8 exposure	
			1.23	K2III			1 sec		
			"	"			1/2 sec		
			"	"			1/4 sec		
							1/8 sec		
							1/15 sec		
							1/30 sec		
							1/60 sec		
							1/125 sec		
							1/250 sec		
							1 sec		
							1/2 sec		
							1/4 sec		
							1/8 sec		
							1/15 sec		
							1/30 sec		

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Date 4 and 8-9 1934 Observer NN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	α Boo	14 14.3	+19 20					00:25		
	"	"	"					00:26 30		
	"	"	"					00:27		
								00:27 05		
								00:28 40		
								00:29 30		
								00:30 10		
								00:30 40		
								00:35 05		
								00:36	00:45	
	α Boo	14 14.3	+19 20					01:58		
								02:27	02:45	
								04:18	04:30	

Dome Temp. .....

Focus Newton

Dome Temp. .....

Transparency Conditions poor ~ 2-3 mag

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. Filter	Program	Exp. Mtr.	REMARKS	Quality
			123	K2 III			10 sec	RG610 filter	
							1/125 sec		
							1/250 sec		
							1 sec		
							1/2 sec		
							1/4 sec		
							1/8 sec		
							1/15 sec		
							1/30 sec		
							1/60 sec	1/125 / 1/250 / 1 / 1/2 / end of roll.	
			125	K2 III		1/30 / 1/60 / 1/125 / 1/8 / 1/15 / 1/30	1/60 / 1/125 / 1/8 / 1/15 / 1/30 / 1/60 / 1/125 / 1/8 / 1/15 / 1/30 / 1/60 / 1/125		
					1/8 / 1/15	1/30 / 1/60 / 1/125 / 1/8	1/15 / 1/30 / 1/60	1/125 / 1/8 / 1 / 1/8 / 1/15 / 1/30 / 1/60 end of roll dark at 22:40	
					1/8 / 1/15	1/30 / 1/60 / 1/125 / 1/8	1/15 / 1/30 / 1/60 / 1/125	1/8 / 1/15 / 1/30 / 1/60 / 1/125 / 1/8 / 1/15 / 1/30 / 1/60 / 1/125 / 1/8 / 1/15 / 1/30 / 1/60 / 1/125	

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Date April 9/10 1974 Tues Wed **Observer** NN-R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
#1	Procyon & C.M. A	1975 7 37.7	1975 +05°19	24w	Tri X			20:17	20.27	
" #2	"	"	"	"	"			20 37	20 42	
" #3	"	"	"	"	"			20:58	21:01	
" #4	"	"	"	"	"			21:16	21:20	
" #5	"	"	"	"	"			21:27	21:31	
" #6	Procyon & B.D.	14 :43	+19 20	"	"			22 38	22 45	
" #7	"	"	"	"	"			22. 54	22:58	
" #8	"	"	"	"	"			23:04	23:09	
" #9	Spica & Vir	13 23.6	-11 00	"	"			00.47	00:52	
" #10	"	"	"	"	"			01:01	01:08	
" #11	"	"	"	"	"			01:17	01 23	
" #12	Vega & Lyra	18 35.4	+38°45	"	"			02:25	02:29	
" #13	"	"	"	"	"			02:35	02:39	
" #14	"	"	"	"	"			02:51	02:55	
" #15	"	"	"	"	"			03:03	03:12	
" #16	"	"	"	"	"			03:15	03:35	

Dome Temp. 20°F 64%

Focus .....

Dome Temp. 20°F 70%

Transparency Conditions ..poor.....

Speckle interferometry 10X enlarge at newton focus

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Time	REMARKS	Quality
21h46m W	+05°17'		0.78	F5 I			1/30 sec	end of roll of film 20 exposure	
22h50m W	+05 17'		"	"			1/30 sec	end of roll of film 20 exposure	
02h18m W	05 17'		"	"			1/30 sec	end of roll of film 20 exposure	
03h36	+05°17'		"	"			1/30 sec	end of roll of film 20 exposure	
05h42m W	-01°12		"	"			1/30 sec	" " " " " "	
22h35m W	+19°20		1.23	F5 II			1/30 sec	end of roll of film 36 exposure	
23h22m E	+19°20		"	"			1/30 sec	end of roll of film 36 exposure	
23h19m E	+19°20		"	"			1/30 sec	end of roll of film 36 exposure	
00h24m W	-11°02'		0.73	B IV			1/30 sec	end of roll of film 36 exposure	
00h54m W	-11°02'		"	"			1/30 sec	end of roll of film 36 exposure	
01h54m W	-11°02		"	"			1/30 sec	end of roll of film 36 exposure	
23h11m E	+38°44		0.04	A, II			1/30 sec	end of roll 36 exposure	
23h02m E	+38°44		"	"			1/30 sec	end of roll of film 36 exposure	
04h46m E	+38°44		"	"			1/30 sec	end of roll of film 36 exposure	
03h34m E	+38°44		"	"			1/30 sec	end of roll of film 36 exposure	
03h18m E	+38°44		"	"	lamp	exit of	5 sec	end of roll of film 36 exposure	

197 II/

Date Apr 10-11/74 wed-Thurs **Observer** NM-TA **Julian Day**

Plate No.	Object	R.A. 1900 70	Declination 1900 70	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
roll 17	χ Sgr A	05 13.1	-E 04	Newt	Tri-X			20:30	20:40	
" 18	"	"	"	"	"			20:50	20:54	
" 19	"	"	"	"	"			21:05	21:08	
" 20	"	05 53.5	+7 24	"	"			21:21	21:25	
" 21	"	"	"	"	"			21:33	21:40	
" 22	"	"	"	"	"			22:00	22:02	
" 23	"	"	"	"	"			22:08	22:13	
	Saturn	05 57.3 (77)	+22 40 (74)	"	32ASA			22:35	22:45	
" 24	Orion A	05 37.7	+5 18	"	Tri-X			22:52	22:57	
" 25	"	"	"	"	"			23:05	23:10	
" 26	"	"	"	"	"			23:20	23:30	
" 27	Spica	13 22.6	-11 00	"	"			23:56	0:0	
" 28	"	"	"					00:07	00:12	
" 29	"	"	"					00:18	00:24	
" 30	χ Boo	14 14.3	+19 20					00:43	00:48	
" 31								00:54	00:58	

Dome Temp. 38° A532 Transparency Conditions Excellent

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 27W	-8 11		+0.1	682a	R			1/5 sec for 3 exp	
04 38W	"		"	"	R			"	
04 53W	"		"	"	R			"	
04 38W	+7 25		.32	682b	R			1/30 sec	
04 43W	"		"	"	R			" film slip	
05 03W	"		"	"	R			"	
05 16W	"		"	"	R			"	
								3 sec, 1 sec, 1/2 sec, 1/5, 10 sec, 5 sec	
04 17W	+5 18		0.78	F5V	R			1/30	
04 30W	"		"	"	R			"	
04 50W	"		"	"	R			"	
00 36E			+.67	K2V	R			1/5	
00 14E					R			"	
00 03E					R			"	
00 17E	+19 18		+1.17	K2III	R			1/30	
00 17E					R			"	

#2
1913

Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
Run# 32	α Boo	14 12 3	+19 20	Reed's	Tri X			01:02	01:06	
" 33	Vega	18 35 9	+38 45	"	"			02:34	02:38	
" 34	"	"	"	"	"			02:44	02:48	
" 35	"	"	"	"	"			02:51	02:55	

Dome Temp. .....

Focus .....

Dome Temp. 35°F 8:30

Transparency Conditions .....

ng Time C.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. Filter	Program	Exp. Mtr.	REMARKS	Quality
06		00 10E					R			1/30 sec 360 ex	
38		03 00E	+38 44		10.4	Hour	R			1/30 sec	
41		02 50E	"	"	"	"	R			" some clouds	
58		02 42E	"	"	"	"	R			"	

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Date Apr 13-14 Sat Sun 1914 **Observer** F. McFadden **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38043	HD99746	11h 24.8	+30° 32'	Cr2	Ilford 6	17/15	58°	20:24	21:06	A
39043	HD104451	11 56.6	+30 06	"	"	17/9		21:19	23:18	B
38044	HD127559	14.2 15 21.7	+15 03	"	"	17/15		23:34	01:25	C
38044	Comp	make	focus		"					
~~38045~~	~~HD99746~~	~~11 24.8~~	~~30° 32'~~	~~Cr2~~	~~"~~	~~17/15~~		~~21:29~~		A
38044 F1	Focus	Test					53°			B
F2							"			A
F3							"			B

Dome Temp. 64° F H=703

Focus

Dome Temp. 45.6 H=[illegible]

Transparency Conditions Very Good

UFO report by Mr Mabj. 9:57 PM [illegible] From 5° N of Zen to 30° East to West Horizon in 2 secs. Constant brightness [illegible]

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
06	A	01 13 E	+30 08	2-5"	6.6-7.1	F2-F2	15-15-15	Sp Blu-Blu	100/150		
18	B	00 27 W	+29 43	2-4"	8.7	9F3	13-15-15	"	800/240		
5	C	00 30 E	+14 49	"	7.9	B5	15-15-15	"	700/250	[illegible]	
	A		+30 09	[illegible]	6.8-7.1	[illegible]	15	"	[illegible]	[illegible]	
							5/5	set 40-R		Focus in Red Advanced	
							"	set 00-R			
							"	set 20-R			

Date Mon Sun Apr 15/16/74 **Observer** Tn:Cm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38045	HD 37479	05 23.7	-02 39'	G12	IIa-O	13/.5	40°	20 16	21:35	A
38046	~~HD 37887~~	~~05 22.4~~	~~-01 39~~	~~G12~~	~~IIa-O~~	~~13/.5~~	"	~~21 36~~		B
38046	HD 41887	5h 16.1	+15 51	G12	IIa-O	13/.5		22 05	23:13	C
38047	HD 37887	5h 23.7	+15 08'	G12	IIa-O	13/.5	32°	23:32	00:54	A
38047T1	Cal step wedge	for 38045			"					
38047T2					"					
38048	HD153720	16h 56.0m	+75°34'	G12	"	13/.5		01:03	01:50	B
38049	HD154628	17h 00.9m	+77° 18'	"	"	13/.5		02:03	02:43	C
38050	HD 152224	16h 47.0m	+32° 44'	"	"	13/.5	37°	02:51	03:36	A
38051	HD190658	20 00.9	+15 13	"	"	13/.4		03:40	04:19	B
38051F1	Focus Test					13	35°			F
" F2						"				B
" F3						"				B

Dome Temp. 28° H-85%
Focus 50-R & 60-R
Dome Temp. 34° H=78%

Transparency Conditions good - Wind disappearing to south

Warren * 3 plates to be overdeveloped are at far right of box

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS (*Overdevelop please)	Quality
W	-2° 36'	3-1/2-6"	6.32	B3J	15-14-13	Sp Bin - Bln	400/74	Tel Powered [illegible]	
"	"	[illegible]	[illegible]		13	Sp Bin - Bln [illegible]	[illegible]	Cirrus haze, trees at-	
04 32 W	+71 43	2-4"	[illegible]	NO	15-15-15	Sp Bin - Hd	400/140	Tel Powered (60-R)	
01 14 E	+14 48	"	7.3	EO	15-15-15	Sp Bin Bln	400/140	Tel Powered (60-R)	
								*overdevelop also	
1 45 E	+75 26	"	6.84	FO	15-15-15	Sp Bin - Md	400/180	Fld drown slight doubt?	
0 56 E	+77 42	"	6.66	AO	15-15-15	Sp Bin Hd	400/140	Fld Drown	
00 04 W	+32 38	"	6.26	KOTU	15-15-15	Sp Bin Hd	400/200		
01 57 E	+15 27	"	6.34	M2 III	15-13-12	"	400/161	*overdevelop also	
		[illegible]	no filter		5/5	Sel 60-R			
	"				3/3	" 20-R			
	"				3/3	" 100-R			

199

* Nitrogen Treated

Date Over-Week Apr. 16/17 **Observer** In-Com **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38052	σ Ori AB	05h 35.7	-02° 39'	G-12	IIIa-J	13/.5		19:41	19:52	C
38053	HD 37479 σ Ori E	05h 35.1	-02° 39'	G-12	IIaO-b	"	14°	19:53	21:01	A.
38054	HD 37223	05h 26.5	+10 09	G-12	IIaO-b	"		21:10	21:31	B
38054 T	Cal strip	same			"					
38055	HD 37369	15h 21.7m	+15° 03'	G-12	IIaO-b*	13/.5		21:44	23:12	C
38056	HD 154428	17 00.9	+77 48	"	"	"	14°	23:24	23:45	A
38057	HD 153720	16 56.0	+75 34	"	"	"		23:50	00:25	B
38057T1	Cal strip				"		Cor			
38058	HD 152224	16h 47.5m	+32 44	G-12	"	13/.5		00:29	01:03	C
38059	HD 142926	15h 55.1	+42 51	G-12	"	13/.9		01:05	01:28	B
38060	HD 154428	17 00.9	+77 48	G-12	"	13/.5		01:34	01:47	C
38061	HD 186647	19 [illegible]	+13 31	G-12	"	13/.5		02:03	02:31	A
38062	HD 190658	20h 06.7m	+45 13	"	"	13/.4		02:35	03:31	B
38063	HD 137569	15h 21.7	+15 03	"	"	13/.5		03:24	04:35	C
38064	HD 161096	17h 38.2	+4 37	"	"	"	42°F	04:40	04:[illegible]	C

200

Dome Temp. 32° 40%

Focus 50-R

Dome Temp. 36° 82%

Transparency Conditions excellent

Looked at Cyg X-1 at 2 AM - seemed bright - very young

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
C3 36W	-02° 36'	2"	V=4.0		3-3-3	Sp bin-Blu	Ap/50		Fine but guiding
C4 46W	-02° 26'	2-4"	6.32	B3p	15-15-15	Sp bin-Blu	400/136		sl strong standard
02 23W	+9° 53'	1"	6.8	A0	15-15-15	Sp bin-Hd	400/140		Fine
									Fine
02 51E	+14° 51'	1-2"	7.9	B5	13-15-13	Sp bin-Blu	400/120		Funny!
0? 50E	+17° 42'	2"	6.66	A0	14-13-13	Sp bin-Hd	400/130		"
03 07E	+15° 29'	1-2"	6.84	F0	14-14-14	"	400/160		"
									"
02 24E	+32° 38'	2	6.26	K0III	13-14-14	Sp bin-Hd	200/100		Fine
01 05E	+42° 01'	2-3"	5.6	B2	13-13-14	Sp bin Hd	200/125		"
01 46E	+17° 43'	1-2"	6.66	A0	13-13-13	"	400/70	Nit filter for ½	vs/weak
01 50E	+3° 17'	2-4"	6.1	F0 IV	13-13-13	Sp bin-Hd	200/65	broken 2/3	Fine
03 22E	+15° 29'	2-3"	6.34	K0.2 III	13-13-13	"	200/71		v/d bend
02 32W	+14° 51'	1-3"	7.9	B5	13-13-15	Sp bin-Blu	400/125		Fine
02 22W	+14° 41'	2"	3.93	K1 III	13-30	Std rel.	40/14		v/s strong

201

* warmated then cloud in NE ~5 min

Date Wed-Thurs April 17/18 **Observer** Tn-Fr/Bh-Tn **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38065	HD85503	$9^h 47.1$	26° 29'	G12	IIIaJ*	13/1.3	53°F	19:50	20:24	A
38066	HD71369	$8^h 29.9$	+61° 05'	G12	"	13/1.3		20:30	20:52	C?
38067	HD101501	$11^h 35.8$	34° 46	"	"	13/1.3		20:58	22:12	B
38068	HD124897	$14^h 11.1$	19° 42'	"	"	13/1.9	53°F	21.18	22:37	C
38069	HD113226	$12^h 57.2$	11° 30'	"	"	13/1.3		22:42	23:11	A
38070	HD 95689	$10^h 37.6$	+62° 17'	"	"	13/1.3		23:18	23:32	B
38071	HD131873	14 51.0	+74 34	"	"	"		23:50	00:15	C
38071T	Cal step	wedge	4min		"	for 38065		-71		
~~38072~~	~~HD104951~~	~~$11^h 9.6$~~	~~+30° 06'~~	~~G12~~	~~IIaO-b~~	~~1-3~~		~~00:24~~		~~A~~
38072	HDE226868	$19^h 54^m.6$	+34° 56'	G-12	IIa-Ob	20/1.3		01:55	04:18	A
38072T	Cal step	wedge	90sec		"					
38073	HD 201433	21 09.4	+29 ~~46~~	G12	"	13/1.5		04:30	04:~~45~~5	B

Dome Temp. 54°F 56%RH

Focus Set 40-R

Dome Temp. 42°F H=74%

Transparency Conditions Very Good : s/ cloud

Good Aurora from ~ 23:00 until almost dawn. Spectacular from 0h - 02h.

B

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
0 hours	+26° 11'	1"	5.1	K1	3-3-3	Fr-Giant	80/505		1.21	fair
1h 49W	60° 51	2"	4.2	G5	3-3	"	40/160	Forgot to pull dark slide?	0.84	no exposure
~1h W	34° 26'	1'-2'	6.0	G8	3-3-3	"	80/270		0.72	strong
2h 10m E	19° 23'	2"	1.3	K2	3-3-3	"	20/300	thru cloud	1.29	strong
0 24 E	+11 09	2"	3.74	G8	3-3-3	"	40/160	end broken off	0.93	strong
1h 55W	61° 56'	2"-3"	2.85	K0	3-3-3	"	40/220		1.06	s. strong
21m 10m E	74° 18'	"	3.53	K4III	3-3-3	"	40/350	Bright Aurora in area	1.46	fair
								Dew 1mi (-5.5°F MW)		
		2"	8.7	gF3	K-	Sp Bin - Bln	800/	Forgot to pull dark slide		
02 02E	+35 11	2	9.74	09.7Ib	13-13-13	Sp. Bin - Bln	800/210	" " " for 1st 30 min		
02 56 E	+30° 07'	3	5.6	A0	15-15-15	"	80/24	[illegible] on [illegible]		[illegible]

203

Date Tues-Fri Apr 18-19/74 **Observer** Bla-Tm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38074	HD104451	11 56·6	+30 06	G12	IIaO-b	25/13	47°F	20:02	22:25	A
38075	HD137569	15 21·7	+15 03	"	"	13/1.5		22:30	00:47	B
38075T	Cal step	wedge	90sec		"					
38076	HD141456	15 44.1	+13 01	G12	"	13/1.5	43°F	00:52	01:28	C
38077	HD130109	14h 41m.2	+ 2° 19′	G-12	IIIaJb*	13/1.7		01:34	01:49	A
38078	HD130441	14 45.4	−15 56	G-12	IIIaJb*	13/1.7		01:52	02:02	B
38079	HD137721	15h 11m.6	−17° 30′	G-12	IIaOb	13/1.5		02:07	03:10	A
38080	HD137769	15h 21m.7	+15° 03′	G-12	IIaOb	17/1.5		03:15	04:21	B
38081	HD152614	16h 49m.3	+10° 20′	G-12	IIIaJ	13/1.5	56	04:24	04:48	C
38081T	Cal step	wedge	30sec		"	for	plates	38077, 78, 81		
~~38082~~	~~—~~	~~—~~								

Dome Temp. 34° H=62%

Focus 40-R

Dome Temp. 27° H=68%

Transparency Conditions High Cirrus poor to fair

Among other things; another moderate Aurora

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 06m E	+29° 45'	2-4"	8.7	gF3	12-12-12	Sp Nebs - Lib	800/220	time check for 15 tho 16	Poor
01h 08m E	+14 51	"	7.9	B5	15-13-15	"	400/130	Now? Bright red star mv ~1.5 Position ~ 05h 58.7 + 24° 50' (1974) color like ★ Ori MARS! You Dummy!!!	of the,
			Dec 7 min	068°F	MW72				
00 58 E	+12° 51'	2-3	6.80	A0	15-15-15	"	400/120	Changed Focus to 50R	stars
00 35W	+2° 04'	3	3.74	A0V	2-2-2	"	40/85		Fair
00 42W	-15° 51'	5	2.89	A5IV	2-2-2	"	40/85		fair
01 35E	-18 22'	3-5"	6.63	O7III	15-15-15	"	400/150		weak arc stars
02 27W	+14° 51'	4-5	7.9	B5	14-12-12	"	400/130		stars
01 26W	+10 17	"	4.30	B8V	2-2-2	"	40/85		stars
								Dec 7 min 068°F Hi=62	

205

* evacuated only

Date Fri-Sat Apr 19/20/74 Observer Ir-Ri/Pak-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38082	HD 85503	09h 47.1	+26° 29	G-12	IIIaJ *	13/.35	42°F	19h 53	20: 56	A
38083	HD 71369	08h 22.0	+61° 03'	"	"	13/.35	42°F	21:00	21: 20	B
38084	HD 95689	11h 57.6	+60° 17'	"	"	13/.35	42°F	21: 23	21: 32	C
38085	HD 96833	11h 04.1	+45°02	"	"	13/.35		21: 34	22: 01	A
38086	HD 101501	11h 35.8	+34°46	"	"	13/.35		22: 04	23: 24	B
38086T1	cal step wedge for plates 38082 - 38089				IIIaJ *	4 min				
38087	HD 113 226	12h 57.2	+11° 30	"	"	13/.35		23: 26	23:47	C
38088	HD 124897	14h 11.1	+19° 42'	"	"	13/.35		23: 50	23: 53	A
38089	"	"	"	"	"	"		23: 54	00: 00	B
38090	HD 104451	11h 56m.6	+30° 06'	"	IIIaO B	20/.3		00: 12	01: 27	C
38091	HD 130 109	14h 41.2	+00°.19'	"	IIIaJ B	13/.7	40°F	01: 33	01: 44	A
38092	HD 130 841	14h 45.4	−15°38	"	"	13/.7		01. 47	01: 54	B
38093	HD 137 569	15 21.7	+15°03	"	IIIaO B	13/.5		01: 59	02. 49	C
38093T1	cal step wedge for plate 38091, 92, 95, 97				IIIaJ B	3 min				
38093T2	cal step wedge for plates 38090, 93, 94, 96				IIIaJ B	9 min				
										A

end of page

Dome Temp. 38°F 55%

Focus 50-Red

Dome Temp. .....

Transparency Conditions excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
00h38W	+26°12'	2"	5.11	K1.5	3-3-3	IR - Giant	40/250	μ Leo	1.21	Fine
02h26W	+60°52'	2"	4.2	G5	3-3-3	"	40/150	0 U Ma	0.84	sl. stray
00h04W	+61°56'	2"	2.85	K0	3-3-3	"	40/187	α U Ma	1.06	sl. stray
00h26W	+44°40'	2"	4.14	K1III	3-3-3	"	40/210	ψ U Ma	1.13	sl. stray
01h18W	+34°23'	1"	6.07	G8II	3-3-3	"	40/130	61 U Ma	0.72	sl. stray
00h31W	11°10'	2"	3.7	G8	3-3-3	"	40/140	ε Vir	0.93	sl. stray
00h47E	+19°21		1.29	K2III$_{Ba}$	3-3-3	"	20/80	α Boo Arcturus	1.23	sl. stray
00h39E	+19°21		"	"	3-6	"	20/102	"	"	sl. stray
00h00W	+29°44	2	8.7	gF3	15-12-12	Sp Bi - Blue	800/220			sl. stray
00h33W	+22°05'	2	3.74	A0I	3-2-2	" "	40/85	changed focus to 55R		sl. stray
00h40W	-15°50	3	2.89	Am	2-2-2	" "	40/85			
00h52W	-14°50	2	7.9	B5III	12-12-12	" "	40/131			sl. stray
								Dev. 7 min E (-0.5 mm)		
								" " "		

207 Pg 2.

Date Apr. 20/24 Sat. cont'd **Observer** Ri-Rak **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38094	HD167771	$18^h 11^m.6$	$-18° 30'$	G2	IIIaJ Hd	13/.5		02:56	03:43	D
38095	HD 164577	$17^h 56.6$	$+1° 18'$	"	IIIaJ B	13/.5		03:47	04:05	B
38096	HD 141458	$15^h 44.1$	$-13° 01'$	"	IIaO B	13/.5		04:07	04:26	C
38097	HD 152614	$16^h 49.3$	$+10° 20'$	"	IIIaJ B	13/.5	38°F	04:28.5	04:44	A

Dome Temp. .....

Focus 55 R

Dome Temp. 240F 61%

Transparency Conditions excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 59E	-18° 23'	4	6.63	O7III	12 12-	Sp Bri -Bk	40/150		Fair Sweden
00h 20E	+01° 21'	2	4.42	A1V	2-2-2	" "	40/85		Fair
00h 12W	+12° 51'	2	6.80	A0	12-12-12	" "	40/120		Fair
01h 25W	+10° 16'	2	4.30	B8V	2-2-2	" "	40/85		Fair
								not a cloud in sight	

209 Visitors. 70/70 Silver/M3 good

* Lkd 4" in N_2

Date Apr 20/21 74 Observer [illegible] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38098	HD110411	$12^h 36^m.8$	+10° 47′	G-12	IIIa-J*	13/1.7	45°F	22:42	23:25	B
38099	HD130109	$14^h 41^m.2$	+2° 19′	G-12	IIIa-J*	13/1.7		23:28	23:48	C
38099T	Cal strip	" edge	3 min		"					
38100	HD141458	$15^h 44^m.1$	+13° 01′	G-12	IIa O-6	13/1.5		23:52	00:38	A
38101	HD 41513	$15^h 44^m.4$	−3° 07′	G-12	IIIa-J*	9/1.5		00:41	01:01	C
38101T	Cal strip	" edge	90 sec		IIa O-6					
38102	HD 148857	$16^h 25^m.9$	+2° 12′	G-12	IIIa-J*	9/1.5		01:04	01:19	A
38103	HD152614	$16^h 52^m.6$	+10° 20′	G-12	IIIa-J*	9/1.5		01:22	01:36	B
38104	HD167771	$18^h 11^m.6$	−18° 30′	G-12	IIa-O6	13/1.5		01:41	03 29	C
38105	HD176502	18 55 5	+40 33	"	"	9/1.5		03:36	04:11	A
38106	HD164577	$17^h 56^m.7$	+1° 18′	G-12	IIIa-J*	13/1.5		04:15	04:41	C
38108 F1	Focus	Test		"	O-6	13	41°F			E

Dome Temp. 34° H=65%
Focus 50-R
Dome Temp. 37° H=65%

Transparency Conditions Hazy - Some Cirrus during night

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:05		00 22W	+10° 27'	3-4"	4.97	A IV	2-2-5	Sp. Bin-Blu	40/80		Strong Sun Sun Line
1:47	C	01 18E	+2° 02'	2-3	3.74	A0 V	2-2-2	Sp. Bin-Blu	40/70		
										Dew 7 min @ 68°F MWP 8	
1:38	A	01 32E	+12° 52'	2-3"	6.80	A0	15-15-15	Sp. Bin-Blu	400/120	Iron Ax filter was 1/4" [illegible]	Good in Line
1:31	C	01 09E	-3 16		3.50	A0 V	2-2-2	Sp. Bin-Blu	40/70		Fine
										Dew 7 min @ 68°F MWP 8	
1:19	A	01 33E	+2° 06'	2	3.86	A1 V	2-2-2	Sp. Bin-Blu	40/50		Fine
1:36	C	01:39E	+10° 16'	1-2	4.30	B8 V	2-2-2	Sp. Bin-Blu	40/50		Fine
2:21	C	01:09E	-18 23	2-4"	6.63	A7 III	15-15-15	Sp. Bin-Blu	400/150		Fine
4:11	C	01 09E	+40 42	2-3	6.12	B5s	15-15-15	Ap. G1	200/70		Strong
		00 20W	+1° 24'	3-8"	4.46	A IV	2-2-2	Sp Bin-Blu	300/250		Fine
		[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	R	Good

211

Date April 21/22 Sun-Mon **Observer** Saunders TN/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
2907		12h 56		CANCELLED						A

Dome Temp. 67° H=62%

Focus 25-R

Dome Temp. .....

Transparency Conditions Cloud

ing Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			10° 25'	3							

213

Date April 22/23 1923 **Observer** Am. 2n **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38103	HD 152224	16h 47m.0	+32° 44′	G·2	Iao-b	13/.5	55° F	00 02	00 59	A
38107	Col sig	edge	90 sec		"					

Done
Focus
Done
Hour An
End

Dome Temp. 48°F H-87%

Focus 25-R

Dome Temp. 45° 95%

Transparency Conditions Hazy

ling Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0.1	-	02 05E	32° 38	3	6.26	K52	IA-13-9	Sp Dw-1d	400/96	thin cloud* overdevc of Des 9 min @ 680:="MW P2	Exc

215

* evacuated only

Date Wed Thu April 24/25 1974 **Observer** F.R. Harrison/R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38108	HD 85503	09447.1	+26° 29'	G-12	IIIaJ*	13/.35	46°F	20:03	21:45	A
38109	HD 98839	11h 17 3	44° 02	G-12	IIIaJ*	13/.35	45°F	21:50	23:13	B
38110	HD 113226	12h 57 2	+41° 30	G-12	IIIaJ*	13/.35		23:18	23:37	C
38110T1	cal step wedge for plates 38108 – 38112				IIIaJ*	4 min				
38111	HD 95689	10h 57.6	+62°17'	G-12	IIIaJ*	13/.35		23:41	23:52	A
38112	HD 124897	14h 11.1	+19°42'	G-12	IIIaJ*	13/.35		23:56	23:59	B
38113	HD 132869	15h 21.7	+15 03'	G-12	IIaO	13/.5		00:10	01:30	C
38114	HD 130841	14h 12.4	−15 38'	G-12	IIIaJ	13/.7		01:33	01:44	A
38115	HD 130109	14 41.2	+020° 19	G-12	IIIaJ	13/.7		01:47	02:02	B
38116	HD 141465	15 44.1	+13° 01	G-12	IIaO	9/.5		02:06	02:44	C
38116T1	cal step wedge for plates 38114, 15,				IIIaJ	3 min				
38116T2	cal step wedge for plates 38113, K-17				IIaO	9 min				
38117	HD 167771	18 11.6	−18° 30	G-12	IIaO	13/.5	42°F	02:50	03:44	A
38118	HD 164577	17h 56	+1 18	G-12	IIIaJ	13/.5		03:51	04:14	B
38119	HD 152614	16h 49' 17°	+10° 30	G-12	IIIaJ	13/.5		04:18	04:33	C
38120	38116				IIIaJ	9/.9	42°F	04:35	04:45	A

Dome Temp. 32°F 61%

Focus 45 R

Dome Temp. 28F 62%

Transparency Conditions good

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
45		0h 46m W	+26°11	3-4	5.11	K1.5	3-3-3	Giant IR	40/330	u Leo	1.21	Fair
13	8	0h 45m W	+43°40'		6.00	G8II	3-3-3	" "	40/145	36 U Ma	0.98	"
37	6	0h 29m W	+110°10'	2	3.74	G8IIIa	3-3-3	" "	40/100	ε UMi	0.93	Fair
										Dbl 7 Min @ 65° mag 2		
3.5		0h 27m W	+61°57	4"	2.85	K0	3-3-3	" "	40/130	ζ U Ma	1.06	Fair
59	8	0h 23m E	+19°24'	4"	1.29	K2IIIp	3.33	" "	40/110	ζ Boö Optimus	1.23	Fair
30	12	0h 00m 03s E	+15°52'	3-4"	8.10	B5III	12-12-12	Sp-K Clm	400/130			Good
1.44	4	0h 04m 47s W	-15°51'		2.89	Am	3-3-3	"	40/85			Good
02	8	1h 10m W	+00°05'		3.74	K0V	3-3-3	"	40/85	broken & missing		Fair guiding
2.44	1	0h 10m W	+12°53'	4	6.8	A0	12-12-12	"	400/120			Good guiding
										Dbl 7 Min @ 64° mag 2		
										" " "		
3.44		0h 28m E	-18° 23'	4	6.63	O7III	12-12-12	"	400/150	Lined focus to SOR		
4.44	8	0h 07m W	+01° 23'		4.46	A1V	3-3-3	"	40/60			Fair
33	6	1h 35m W	+10° 17'	3	4.30	B8V	3-3-3	"	40/60			Fair
		1h 20m W	+24°57'		3.23	K5V	3-3-3	Comet SJ	40/98			Fair

#1

217 Primary Mirror Washed - 26 April, L * waxed only

Date Fri-Sat April 26/27 1974 **Observer** Ir-To/Ta-Mc Forbes **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38121	MOON	—	—	G12	IIIaj*	13/1.25	55°F	19:51	19:54	A
38122	HD 62509 Pol/ax	07 39.2	+28 16	"	"	"		20:11	20:15	B
38123	HD76294	08 50.1	+6° 20'	"	"	"		20:21	20:35	C
38124	HD71369	08 32.0	+61° 03	"	"	"		20:41	20:59	A
38125	HD82635	09 28.1	+36 50	"	"	"	54°F	21:03	21:41	C
38126	HD101504	11 35.8	+34 46	"	"	"		21:45	22:41	A
38127	HD104797	14 11.1	+14 42	"	"	"		22:47	23:31	C
38128	HD157919	17 [illegible]1.6	+4° 14'	"	"			22:55	23:36	A
38128T	Cal step wedge		3 min		"					
38129	HD150100	16 33.8	+53 06	G12	IIIaJ 0.6	13/1.5	53°F	00:28	00:32	A
38130	HD150118	16 33.9	+53 08	"	"	5/1.4		00:50	01:13	E
38131	HD150118	"	"	"	"	5/1.4		01:21	01:30	A
38132	HD140283	15 37.7	-10 36	"	"	13/1.5		01:39	01:43	C
38133	HD152863	16 51.0	+25 54	"	"	"		02:47	03:14	A
38134	HD160835	17 37.0	+24 34	"	"	"		03:19	03:42	B
38134T	Cal step wedge		9 min		"					

Dome Temp. 51°F 41% RH

Focus 30-R

Dome Temp.

Transparency Conditions Very Good

Someone put Tix in my distilled water! All these plates are badly bleached by the Tix drying on them when

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
~3 hour W	+21° 32'	-?	~0	G2 I	9	Ir-Giant	20/35	moon	?	
2h 32m W	28° 09'	2"	2.14	K0 III	9	"	20/48	Pollux	1.00	
1h 42m W	+6° 08'	1-2	4.11	G9 III	3-3-3	"	40/130	S Hya	1.00	
2h 30m W	+6° 51	1-2	4.20	G5 III	3-3-3	"	40/110	o UMa	0.84	
2h 09 W	+36° 35'	"	5.47	G8 III	3-3-3	"	40/125	10 LMi	094	
1 01 W	+34° 25'	1-2	6.07	G8 V	3-3-3	"	40/100	61 UMa	0.72	
1 22 E	+19 19	2"	1.29	K2 III	9-	"	20/62	α Boo (Guide a little high)	1.23	
3 26 E	+4 15'	3-4	5.84	K2 II	3-3-3	"	40/67?	σ Oph (edge of guide star in middle)	1.50	
								Overexposed guider on blue		
1 57 E	+52 59	2"	5.64	A0	14-13-14	Waterloo Cluster Vir Bin	200/70			fair
1 22 E	15302	1-2'	6.58	A2	15-17-16	"	200/50	[illegible]		guiding
1 03 E	"	"	5.56	"	15-17-13	"	200/50	[illegible]		fair
1 03 W	"	2-3'	7.5	A8	14-13-14	Sub Dwarfs	400/120	[illegible]		fair
0 22 W	+3° 52	2"	7.0	G8 III	14-14-14	[illegible]	200/80			guiding
0 14 W	+24 36	1-2'	7.6	K1 III	14-A-14	"	400/170			fair
								Dec 7 mi 66 + mwP2		

#2

219

Date Sat Apr 27 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38135	HD165590	$18^h 01.^m6$	$+21° 26$	G-12	IIaO6	13/.5	50°F	03:56	04:32	C
38135 F1	Focus Test			G-12	"	13	50°F			P
F2	"			"	"	13	"			B
F3	"			"	"	13	"			B

Dome Temp. < ...

Focus .....

Dome Temp. 46° H-50%

Transparency Conditions .....

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:32	C	0 30 W	+21° 34		7.73	dG1	M-M-1	Waterloo Close Vis. Bin.	400/140	cl haze	Sus-pect
			" " "		sec	R-80	3/3	" "		(back to take up slack)	
					"	R-30	3/3	"		ahead in black by 50 sec	
					"	R-20	3/3	"		5 continuous	

221 Visitors

Date Sat Sun April 27/28/74 **Observer** Ri - McFadden **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38136	HD112033	$12^h 48.4$	+21 48	G-12	IIaO6	13/.5	56°F	22:00	22:46	A
38137	HD124675	$14^h 09.9$	+52°16	"	"	"		22:59	23:36	B
38137T1	cal stys wide				IIaO6	90 sec				

Dome Temp. 40°F H = 69%

Focus 30-R

Dome Temp.

Transparency Conditions hazy

...ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:46	A	00ʰ50	+21°26	4"	5.86	KO	12-13-13	Waterloo Close Vis Bin	200/100	clouds from N-W	fine
:36	B	00ʰ31E	+51°57'		4.6	A8	13-13-13	"	400/120	clouds	fine
										Dew 7mi @68°F mwpz	

223

Date April 29/30 1974 Mon Tues Observer R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38138	HD 130109	14h 41.2	+02°19	G-12	IIIaJ b	13/.7	60°F	00:00	00.22	A
38139	HD 137569	15h21.7	+15°03	G-12	IIa0B	13/.5		00:30	01:32	B
38140	HD 152224	16h47.0	+32°44	G-12	IIa0B	13/.5		01:36	02:42	C
3814071	calstp wedge for plate 38138				IIIaJB	3min				
3814072	calstp wedge for plate 38139 & 38140				IIa0B	90sec				

Dome Temp. 46°F 81%

Focus 25R

Dome Temp. 42°F 77%

Transparency Conditions .....

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.22	h	00h10E	+02°04'		3.74	A0 V	23-3	Sp Bri -Bk	40/85		fine
12	8	00h17W	+14°52		4.10	B5 III	12-24	" "	40/32	clouds overlap plane	Sunding weak
-	2	00h06W	+32°39		6.26	K0 III	12-12	Sp Bri -Hd	400/165	clouds again from the South overlap plane	fair
					Dew 7 min @ 68°F MWP2						
					"		"	"			

Date April 30/May 1 1974 Tues/Wed Observer Hu-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38141	HD 152224	16 47.0	+32 44	G12	IIIaOB	13/15"	60°F	23:39	00:57	A
38142	HD 153720	16 56.0	+75 34	"	"	"		01:05	02:10	B
38143	HD 154528	17 00.9	+77 48	"	"	"		02:15	02:50	C
38143T1	cal step wedge	for plate 38141			IIIaOB	90sec				
38144	HD 186547	19 39.9	+13 04	"	"	13/15"		02:57	03:21	D
38145	HD 190658	20 00.9	+15 13	"	"	"		03:28	04:03	B

Dome Temp. 40°F 73%

Transparency Conditions Good

Focus 25 R

Dome Temp. 35°F 64%

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
57	A	01 35E	+32° 40'	4	6.26	K0III	13-13-13	Hd Sp Bin	400/200		Fair
10		00"26E	+75° 29'		6.84	F0	13-13-13	"	400/160		
50		0 [illegible]8W	+77° 44'		6.66	A0	13-13-13	"	400/120	OPEN DOOR WITH PLATE OVERLAP BROKEN 2 PIECES	guiding fair
										Dec 7 Min @ 65° from PZ	
21		02 00E	+13° 20'		6.1	B8IV	13-13-13	"	400/120		guiding sl. stary
03		01"24E			6.34	M2III	13-13-13	"	400/140	overdevelop plane	sl. wk.

227

* baked

Date May 1/72 Wed Thurs / 74 **Observer** Tn / McF / Bln - Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38146	HD99946	11h 24m 8	+30° 32'	G-12	IIaO b	17/1.4	47°F	20:12	20:52	A
38147	HD 109451	11 56 6	+30 06	"	"	"		20:58	23:37	B
38147T	Comp				"					
38148	HD 110411	12 36 8	+10 47	612	IIIaJ*	13/1.7		23:41	00:12	C
38149	HD 13-109	14h 4m 2	+2° 19'	G12	IIIa-J*	13/1.7		00:16	00:28	A
38150	HD 130241	14 45 4	-1° 38	"	"	"		00:31	00:38	B
38151	HD 167771	18h 11m 6	-18° 35'	"	IIaO b	13/1.5		00:45	01:53	C
38152	DR VUL	20h 05m 6	+26° 27'	"	IIa-Ob	17/1.5		02:00	03:46	A
38153	HD 197123	20h 43m.	+26° 07	"	IIIa-J*	13/1.7		03:30	04:04	B
38154	HD 152614	16h 49m 3	+1° 20'		IIIa-J*	13/1.7	38°	04:07	04:22	C
38154T	Comp		3 min		"					

Dome Temp. 31°F H=50%

Focus 44-R

Dome Temp. 30°F H=62%

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 16E	+30 40	4-8	6.84-7.09	F0+F2	13-13-13	Sp Bin Bln	200/45		Fair
1 57W	+29 45	3-5"	8.7	G3	13-13-13	"	400/130	2" between stars	Fair
								Dew Point @68°F mwp2	
0 01"50"W	+10 27	3"-6"	4.97	AII	2-2-2	"	40/70		Fair
0 04W	+2 04	2	3.74	AOV	2-2-2	"	40/70		Fair
0 10W	-15 51	2	2.89	Am	2-2-2	"	40/74		Fair
0 01E	-4 22	1½"	6.63	O7III	15-15-15	"	400/150		Sunday
2 04E	+26 44	2"	8.6-9.3	B8	15-15-15	"	800/280		Fair
2 20E	+36° 20'	3 6	4.30	B3V	2-2-2	"	40/70		Fair
1 51W	+10° 15'	3"-4"	4.30	B8II	2-2-2	"	40/70		Fair
								Dew Point @68°F mwp2	

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* bolad

Date May 3-4 Fri-Sat /74 **Observer** Th / McF-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38155	HD135772 (HD135727)	15 11.5	+33 41	512	IIIaJ	13/14	50°	21:47	22:26	A
38155T	Calstep wedge		3 min		"					
38156	HD124897	14 11.1	+19 42	"	"	"	47°	22:29	22:34	C
38157	HD137759	15 22.7	+59 19	"	"	"		22:41	23:13	B
38158	HD143107	15 53.5	+27 10	"	"	"		23:16	00:55	C
38159	HD137397	15 20.7	+37 41	"	IIaO-6*	13/15		01:00	01:48	A
38160	HD137391	"	"	"	"	"		01:51	01:58	B
38161	HD146362	16 10.9	+39 07	"	"	"		02:01	02:46	C
38162	HD146361	"	"	"	"	"		02:48	03:12	A
38163	HD150100	16 33.8	+53 06	"	"	"	49°	03:18	03:37	B
38163T	Cal step wedge			90-or	"					

Dome Temp. 38° H=82%

Focus 44-R

Dome Temp. 33°F 84%

Transparency Conditions Clear by 21.30 — 2130 somewhat high winds

B-V

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 20E	+33 28	2"5"	4.44	G8III	no C, iter 3-3	Ii - Giant	40/127	δ Boo +0.95	fair
								Dew 7 min @ 68°F mw 62	
01 12E		"	1.29	k2IIIp	4-4	"	20/60	α Boo +1.23	fair
01 43E	+59 05	2-3	4.41	k2III	3-3-3	"	40/140	ε Dra +1.17	sl. wk.
00 32E	127 01	"	5.38	k2IIIcb	3-3-3	"	40/190	ε CrB +1.73 some cloud	sl. wk.
00 53W	+37 28	'	7.11	dG0	15-14-14	Waterbop Closet a	400/130		fair
01 03W	+37 31	"	4.65	F0V	14-14-14	"	40/15		v. cl.
01 03W	+33 58	"	7.31	G1V	14-14-15	"	400/135		fair
01 27W	+34 00	"	6.20	F8V	15-15-15	"	200/65		fair
01 30W	+52 59	3"	5.64	A0	15-15-15	"	200/45	cloud	fair

231

Two Meyer Tours - by Hus

Date May 4/5 1974, Sat. Sun **Observer** Tn, Bk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38164	HD 109310	12 30.1	+18 56	84 12	IIaO-b	13/5		22 26	22 48	A
38165	HD 109511	"	"	"	"	"		22 50	23 05	B
38166	HD 110411 A	12 46.3	+19 07	"	"	"	45	23 16	23 35	C
38167	HD 110411 B	"	"	"	"	"		23 37	00:05	A
38168	HD 150118	16 33.9	+53 02	"	"	5/1.5		00 20	00:36	B
38169	HD 150117	"	"	"	"	5/1.5		00:39	00:52	C
38170	HD 150100	16 33.8	+53 06	"	"	13/1.5		00 54	01:08	A
38171	Mrk 538-116	19 55.3 1950.0	+39 41	"	"	13/1.4		01 15	02:31	B
38172	[illegible]	19 41.8	-16 05	"	"	13/1.4		02 50	04 16	C
38173	Cal strip	wedge	90sec		"					

Dome Temp. 38°F 4-63°

Transparency Conditions Excellent

Focus

Dome Temp. 32° 4-62

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 47W	+18 36	1"	6.84	F1 V	14-14-14	Close Binary Variables	400/132		Fair
01 03W	"	"	6.22	K2 III	14-14-14	"	200/80		Fair
00 91E	+48 52	"	6.8	F0	14-14-14	"	200/65		Cirrus
00 11E	"	1-2"	7.5	F5	14-14-14	"	200/65		Cirrus
	+53 01	"	6.52	A2	14-6-16	"	200/50		Cirrus Smoky
	"	"	5.56	A2	15-15-15	"	200/50		Fair
00 54E	+52 59	"	5.64	A0	15-15-15	"	200/55		Fair
00 52E	+39 49	"		Em	15-15-15	1 obj	80/39		?
0 00	-16 06	2-3"	8.5	A5	14-14-14	Satellite work	400/50	Fld drum?	Cirrus

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Showed Gentlemen Mars & M3

Date May 7/8/74 Tues/Wed **Observer** Hu-Tan **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~38173~~	~~HD 142926~~	~~15 52.1~~	~~+42 51~~	~~G12~~	~~IIIaJ~~	~~13/.5~~	~~47°~~	~~20:57~~	~~22:31~~	A
38173	HD 153720	16 56.0	+75 34	"	IIaO6	13/.5		22:37	23:44	B
38174	HD 154528	17 00.9	+77 48	"	"	"		23:47	00:24	C
38175	HD 142926	15 52.1	+42 51	"	IIaJ-b	"		00:29	01:36	B
38175T	Fold edge	same	3 min		IIaJ-b					—
38176	HD 190658	20 00.9	+15 13	"	IIaO-b	"		01:42	03:30	C
38177	HD 186547	19 39.9	-13 04	"	"	"	38°	03:33	03:58	A
38177T	Fold edge	same	90 sec		"					

Dome Temp. 36° H-77%

Focus Set 60-K

Dome Temp. 32° H-83%

Transparency Conditions Clear by 20:30
Hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
~~2:37~~	~~A~~	~~2 38 E~~	~~+42 41~~	~~1"-3"~~	~~5.6~~	~~Be~~	~~no filter 2 3-2~~	~~Hd Sp Bin~~	~~200/352~~	~~too bad 4 Her (5 pieces shattered)~~	
3:44	B	2 26 E	+75 29	1"-3"	6.84	FO	14-14-14	"	200/82	East of Pair (sep ~ 10') dust on plate.	
0:32		01 48 E	+77 43	"	6.66	AO	14-14-14	"	200/61		Cent Curve
4:36	B	00 28 W	+42 39	"	5.6	Be	no filter 2-2-2	"	200/360	4 Her (try again!)	fair
										Dew Tmin @ 65°F MwP2	
3:30	C	P 14 8 E	+15 30	2"-3"	6.34	M2III	14-14-14	"	200/150		fair
1:11		0 59 E	+13 19	"	6.1	K8III	14-14-14	"	200/60	some cloud	Ec string
										Dew Tmin @ 63°F MwP2	

L 35

Date May 10-11 '29 Evi-Sey Observer Tm / Rak Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38178	HD 130109	14 41.2	+2 19	G12	IIIaJ-b	131.7	50°	23:18	23:38	A
38179	HD 170841	14 45.4	-15 38	"	"	"		23:40	23:55	E
38180	HD 167771	18 11.6	-18.30	"	IIIaJ-b	131.5		0 0	02:06	C
38181	HD 177569	15 21.7	+15 03	"	"	"		02:11	03:26	B
38182	Calibration		30sec		"					
38183	" "		150sec		IIIaJ-b		13°			

Dome
Focus
Dome

Dome Temp. 42°F 90%

Focus .....

Dome Temp. 38° 90%

Transparency Conditions Hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:27	1	00 10E	+2 04	3-6	3.74	40Ū	2-4	Sp Ri--Pl	40/72		Fair
3:55	1	00 03W	-15 51	"	2 89	Am	2-2-2	"	40/73		Fair
4:06	1	01 11E	-18 23	"	6.63	02 10	14-14-14	"	400/150		Fair
4:24	1	03 14W*	+14 52	2-3	7.9	K5 II	14-14-14	"	100/100	clouds	Fair-Good
		03 28W								Dew Point @ 65°F MWP	

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Date May 15/16 1924 Weather **Observer** Bl-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38182	HD 110411	12H 36.8	+10° 47	G-12	IIIaJ B	13/.5	60°F	21:13	21:52	A
38183	HD 130841	14H 45.4	−15° 38'	G-12	IIIaJ B	13/.7		21:55	22:12	B
38184	HD 141513	15H 44.4	−03° 07'	G-12	IIIaJ B	9/.7		22:18	22:54	C
38185	HD 141458	15H 44.1	+13° 01'	G-12	IIa-O B	13/.5		22:59	23:47	A
38186	HD 167771	18H 11.6	−18° 30'	G-12	IIaO B	20/.5		23:51	00:59	B
38187	DR Vul	20H 09.6	+26° 27'	G-12	IIaO B	20/.5		01:05	02:45	C
38187T1	cal step wedge for plates 38182-84				IIIaJ B	180 cm				
38187T2	cal step wedge for plates 38185-				IIaO B	90 cm				

Dome Temp. 42°F 69%

Focus 20-R

Dome Temp. 37° H=75%

Transparency Conditions Cloud all night
Finally wiped out
Aurora after 0H

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0426 W	+10°26	6-8	4.97	A1 II	2-2-2	Sp Bi -Bh	40/50	Drive failed at 21:25 Fixed 21:28	
0140 E	-15°51'		2.89	Am	2-2-2	" "	40/77		
0137E	-03°16'	4	3.50	A0 II	2-2-2	" "	40/75		
0045E	+12°52'	6-8	6.80	A0	M-M-M	" "	400/120		
02H00ME	-18°22'	4	6.63	07 III	14-14-14	" "	400/150		
0210E	+26°50'	1	8.6-9.3	138	14-20	" "	800/141	OVERDEVELOP right hand side of Box	

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Date 1974 MAY 17/18 FRI/SAT Observer Blu - Ri - Rak Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38188	HD110911	$12^H\ 36^M.8$	+10° 47'	G-12	IIIa-J B	13/.5	60°F	20:21	20:41	A
38189	HD104431	$11^H\ 56^M.6$	+30° 06'	G-12	IIa-O B	17/.5		20.45	22 57	B
38189T1	cal. objs. wedge for plate 38188				IIIa-J B	180 sec				
38189T2	cal objs wedge for plates 38189 + 38194				IIa O B	90 sec				
38190	HD130819	$14^H\ 45^M.2$	-15° 35'	G-12	IIa-O B	13/.5		01:09	01 52	C
38191	HD141513	$15^H\ 44^M.4$	-3° 07'	G-12	IIIa-J	9/.5		01:57	02:20	A
38192	HD152614	16" 49.3	+10° 20	G-12	IIIa J B	13/.5		02:26	02:40	B
38192 (93)	HD170073	18" 22.5	+58° 45'	G-12	IIIa J B	13/.5		02:47	03:08	C
38193T1	cal objs wedge for plate 38191-93				IIIaJ B	180 sec.				
38193 (94)	HD201433	21" 04.4	+29°48'	G-12	IIaO B	13/.7		03:16	03:37	A
38194 (95)	HD198183	20" 43.5	+36° 07	G-12	IIIa J	13/.5	55°F	03:41	03:55	B

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Dome Temp. 45°F 64%

Focus 20 R

Dome Temp. 40°F 64%

Transparency Conditions Cirrus Cloud @ 22:30
Clearing @ 01:30

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.41	A	00h35mE	+10°26'	2	4.97	AIV	2-2-2	Sp. Bin-Blu	40/50		
--	B	02h20mW	+29°45'		6.7	gF3	14-1-14	Sp. Bin-Blu	800/316		
52	C	22h22mW	-15°47'		5.57	F5IV	14-14-14	Vis Bin-Blu	200/80	α' Lib	
.10	A	01h56mW	-03°17'	2-4	3.50	AOV	2-2-2	Sp. Bin-Blu	40/52	cirrus clouds	
.03		01h11mW	+10°17'	2-3	4.30	B8V	2-2-2	" " "	40/50		
.11	C	00h10mW	+58°50'	2-3	4.93	AIV	2-2-2	" " "	40/50		
.37	A	02h06mE	+30°12'	2-3	5.6	AO	14-14-14	" " "	200/93		
.55	B	01h27mE	+36°27'		4.30	B5V	2-2-2	" " "	40/50		
			2.6								

Date May 19/20 1924 Sun Mon **Observer** IR-RI **Julian Day**

Plate No.		Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38195	(96)	HD 62509	07h 39.2	+28°16	G-12	IIIaJ	13/.35	58°F	20:30	20:36	A
38196	97	HD 26294	08h 50.1	-06°20'	G-12	IIIaJ	13/.35		20:40	01:10	B
38197	98	HD 82635	09h 28.1	+36° 50	G-12	IIIaJ	13/.35		21:20	22:48	C
38198	99	HD 124897	14h 11.1	+19°42'	G-12	IIIaJ	13/.35		22:53	22:55	A
38199	200	HD 124897	"	"	"	"	"		22:56	23:01	B
38200	201	HD 113226	12 57.2	11° 30'	"	"	"		23:05	23:25	C
38201	202	HD 131873	14h 51.0	+24°34'	"	"	"		23:32	23:59	A
38202	07	HD 135722 (SAO) HD 135772	15h 11.5	+33°41	"	"	13/.35		00h:04	00:41	B
38203	09	HD 137759	15h 22.7	+59°19	G-12	IIIaJ	13/.35		00:47	01:23	C
38203T1		cal step wedge for plate 38195		-38295		IIIaJ	4/min				
38204	05	HD 163770	17h 52.8	+37°16	G-12	IIIaJ	13/.35		01:27	02:58	A
38205	06	HD 168725	18h 14.1	-02°55	G-12	IIIaJ	13/.35		03 02	03 30	B
38206	07	HD 140573	15h 39.1	+16° 41	G-12	IIIaJ	13/.35	49°F	03 34	03:56	C
38206T1		cal step wedge				IIIaJ	4 min				
38206T2		cal step wedge for plate 38206				IIIaJ	4/min				

Dome Temp. 70° 60%

Focus 25 R

Dome Temp. 34°F 68%

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS		Quality
04h24W	+28° 10'	3-4	2.14	K0IIIb	3-3-3	IP-Grant	20/45	Pollux	1.00	
03h47W	+06°08	3-4	4.11	A9II-III	3-3-3	"	40/12	δ Hya	1.00	
04h46W	+36° 35'	4-10	5.47	G 85III	3-3-3	"	40/14	102 Mi [redacted]	0.94	
00h13W	-19°23		1.29	K2IIIb	9	"	20/3[redacted]	Arcturus Repaired by Frank H	1.23	
00h18W	"	"	"	"	9	"	20/75	"	1.23	
01h56W	+11° 10'		3.74	G8IIIab	3-3-3		40/102	ε Vir	0.93	
00h40W	+74°18'	4-5	3.53	K4III	3-3-3	"	40/224	β UMi	1.46	
01h W	+33°26		4.44	G8III	3-3-3	"	40/141	δ Boo	0.95	
01h31W	+59° 06'		4.46	K2III	3-3-3	"	40/160	ι Dra	1.17	
00h27W	+87° 20'		5.19	A1IIa	3-3-3	"	40/240	ε UMi	1.35	
00h15W	-03°20'		4.20	K0III	3-3-3	"	40/128	ζ Ser	0.94	
23h47W	+06°35		3.81	K2IIICN	3-3-3	"	40/160	α Ser	1.17	
								Groom new plates from old plates		
								level of [redacted] together please		

FIRST 3 in Maj exposed plate box develop together please

next 3 in Maj exposed plate box

Date May 20/21 1924 Mt. Wilson **Observer** Hu - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38207 08	HD 104451	11h 56.6	+30° 06	G-12	IIaO B	17/1.5	55°F	20:35	22:35	A
38208 09	HD 141513	15 44.4	−3° 07′	"	IIIa IB	9/1.5		22:38	22:50	B
38209 10	HD 153924	16 47.0	+32 44	"	IIaO B	13/1.5		22:55	23:30	C
38210 11	HD 153720	16 56.0	+75 34	"	"	"		23:37	00:13	A
38211 12	HD 151525	17h 00.9	+77° 48′	G-12	IIaO B	13/1.5		00:17	00:44	B
38212 13	HD 180547	19 19.9	+13 04	"	"	"		00:53	01:10	C
38212T1	cal step wedge	for plate 38208			IIaO B	180 sec				
38212T2	cal step wedge	for plate 38212--11			IIaO B	90 sec				
38212T3	cal step wedge	for plates 38207, 09-11			IIaO B	90 sec				
38213 14	HD 190658	20 00.9	+15 13	"	"	13/1.5		01:14	02 31	A
38214 15	HD 214946	22 36.7	+44 39	"	"	"		02:36	03 04	B
38215 16	HD 216494	22 48.2	−12 09			13/1.5	50°F	03:29	04:00	C

Dome Temp. 40°F 60%

Focus 33 R

Dome Temp. 35°F 62%

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02h 10m W	+29° 45′	2″	8.7	gF3	14-14-14	Sp Bin - Ed2	200/350		
00h 20m E	-03° 15′		3.50	A0V	2-2-2	"	40/50	3.2 Ser	
01h 44m E	+32° 38	2	6.26	K0III	14-14-14	Hd Sp Bin	200/100		
01h 05m E	+75° 27′		6.84	F0	14-14-14	"	400/165		
00h 37m E	+77° 42′		6.66	A0	14-14-14	"	400/120		
02h 56m E	+13° 18′		6.1	K2III	14-14-14	"	400/120		
								#1176 #1	
								#1172	
								#1173	
04h 56m E	+15° 30	2 3	6.34	M2III	14-14-14	Hd Sp Bin	400/250		
03h 40m E	-14° 55	3	7.12	A2	14-14-14	"	400/120		
03h 15m E	-11° 38	4	5.9	B9V	14-14-14	"	400/110		

Date May 21/22 1974 Tue-Wed **Observer** Hu-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38216 (17)	HD 104451	11 56.6	+30 06	G12	IIaO B	17/.5	62°F	20:35	23:40	A
38217 (18)	HD 152224	16 47.0	+32 44	"	"	13/.5		23:43	00:13	B
38218 (19)	HD 153720	16 56.0	+75 34	"	"	"		00:19	00:53	C
38218 T1	cal str. wedge for plate 38216				IIaO B	90 sec				
38219 (20)	HD 154525	17h00.9	+77°48'	G-12	IIaO B	13/.5		00:57	01:18	A
38220 (21)	HD 186547	19 39.9	+13 04	"	"	"		01:27	01:42	B
38221 (22)	HD 190658	20h00.9	+15°13	G-12	IIaO B	13/.5		01:45	02:46	C
38222 (23)	HD 141458	15 44.1	+12 01	"	"	"		02:51	03:30	A
38223 (24)	HD 216434	22 48.2	−12 09	"	"	"	59°F	03:35	04:00	B

Dome Temp. ~~50~~ 45°F 60%

Focus 20 R

Dome Temp. 44°E 68%

Transparency Conditions light cirrus, hazy
clear ~ ~22.30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3h 18m W	+29° 45'	2-3	8.7	gF3	14-14-14	Bin Sp Bin	800/350	cirrus clouds	
50m 57E	+32° 39'	2	6.26	KOIII	14-14-14	Hd Sp Bin	400/200		
50m 21E	+75° 89	2	6.84	FO	14-14-14	" " "	400/160		
20h 00	+77°44'	2	6.66	AO	14-14-14	Hd Sp Bi	400/120		
02m 21E	+13° 20'	2	6.1	B8IV	14-14-14	"	400/120		
01 37E	+15° 30'	2	6.34	M2III	14-14-14	"	400/250		
113°24W	+12054	2	6.80	AO	14-14-14	Bin Sp Bin	400/120		
03m 11E	-11° 37		5.9	B9V	14-28	Hd Sp Bin	400/50	overdevelop plate	
								dawn	

Date May 23-24 74 Thurs-Fri **Observer** Bla-Tan **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38224 (25)	HD 141458	15 44.1	+13 01	G12	IIa0-L	9/1.5	68°F	20:33	21:28	A
38225 26	"	15H44M.1	+13° 01'	G12	IIa0-R	9/1.5		21:30	22:29	B
38226 27	"	"	"	"	"	"		22:30	23:36	C
38227	Calstg - wide	89 sec			"					
38227 28	HD 141458	15H44M.1	+13° 01'	G12	IIa-OB	9/1.5		23:36	00:31	B
38228 29	HD 141458	15H44M.1	+13° 01'	G12	IIa-OB	9/1.5		00:32	01:32	C
38229 30	HD 141458	15H44M.1	+13° 01'	G12	IIa OB	9/1.5		01:33	02:30	B
38230 31	Fe arc			"	IIa0	9	60°F			E

Dome Temp. 64°F H=52%
Focus 10-R
Dome Temp. 60° H=80%

Transparency Conditions Very Good

ling Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	02°33'E	+12 49	2-3	6.80	AO	15-15-15	Sp Bin - Blu	400/120		
		01 31 E	+12° 49'	3	6.80	AO	15-15-15	Sp Bin - Blu	400/122		
		00 24 E	"	2-4'	"	"	15-15-15	"	400/120	some cloud * Lobe at 36 - Lue 1 [illegible] 26	
		00 32 W	"	3-6	6.80	AO	15-15-15	"	400/120		
		01 32 W	+12 49	"	6.80	AO	15-15-15	"	400/120		
		02 21 W	"	"	6.80	AO	15-15-15	Sp Bin - Blu	400/77	* overdevelop - cloud 02:20	
								no f. filter		(*1 for night of 60 v)	

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+ baked 10 hrs

Date May 24-25/74 Fri-Sat Observer Rh-Jn-Rk Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
38231	HD 104451	11 56.6	+30 06	G12	IIa-O-hyp	17/3	58°F	21:51	01:20	A	57
38231 T	Col stp wedge				"						
38232	HD 167771	18 11.6	-18 30	"	"	13/5		01:27	02:18	B	00 00
38233	HD 201433	21 04.9	+29 48	"	"	13/7		02:25	02:58	C	57

250

Dome Temp. 48°F N: 80%

Transparency Conditions Clear at 21:30

Focus 25-R

Dome Temp. 42° N: 85%

Telescope immovable (balance - Set drift)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21:20	1	05 11W	+29° 43'	3	8.7	gF3	15-13-12	Sp b.n. - E.n.	800/100/75	time check (Comp ed 2310 - 2340)	fair
										Dbl 7 min MWP2 @ 65¢	
21:12	2	00 05E	-18 26	2-3"	6.6	07III	15-14-15	"	400/120	—	Sending
21:58	2	02 16E	+30 07	3"	5.6	H0	15-14-15	"	200/90	guider used - cloud	fair

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* Irwin evacuated his mirror

Sunday-Monday

Date May 26/27 **Observer** I-T **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38234	HD124097	14h11.1	+19°42'	5:2	IIaJ	13/.70	58°	00:50	00:55	A
38235	"	"	"	"	"	13/.35		00:59	01:07	B
38236	HD198149	20h43.3	16°37'	"	"	13/.35		01:24	01:47	A
38237	HD200705	21h01.3	43°32'	"	"	13/.35		01:51	02:32	B
38237T	Tololo wipe		dawn		"					
38238	HD197987	20h27	+33 36	[illegible]	"	13/.35		03:35	03:47	C
38239		12 min	Sky spectrum				48°F	03h49	04:01	A

Dome Temp. 43°F 83%

Focus set 40-R

Dome Temp. 43°F 83%

Transparency Conditions Clear - Hazy

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	B Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.55		2h 41m W	19° 20'	2-4"	1.29	K2 III	3-6	I, - 6 int	20/66	* Arcturus 1.23	fair
.57		2 53 W	"	3	"	K2 II	9	"	20/120	* " (4m pair) "	fair
.[illegible]	A	2 57 E	61° 42'	2-3	4.55	K0 IV	3-3-3	"	40/120	η Cep 0.92	fair
.32		1 52 E x	43° 49'	2	5.41	K4.5	3-3-3	"	40/345	ξ Cyg 1.69	fair
		1 32 E?								Dus (new spectrum) MWP2b 8mm + 63	
.47		0h 55 E	+33 52	3	3-8	[illegible]	3-3-3	"	40/100	ε Cyg	fair
1.01							9	"		same h α, δ as ε Cyg	no spectrum

Date May 27/28 Mon-Tues **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38240	HD 137569	15 21.7	+15 02	G12	IIaO3	131.5	52°	20:38	21:39	A
38241	HD 104451	11 56.6	+30 06	"	"	17/14		21:43	23:55	C
38242	HD 152224	16 47.0	+32 44	"	"	131.5		23:58	00:40	B
38242T	Calstop wedge		90 sec		"					
38243	HD 153720	16 56.0	+35 34	G12	"	131.5		00:45	01:29	C
38244	HD 154528	17 00.9	+27 48	"	"	"		01:36	02:06	B
38245	HD 186547	19 39.9	+13 04	"	"	"		02:12	02:33	C
38246	HD 190658	20 00.9	+15 13	"	"	"		02:36	03:49	A
38246T	Focus Test			"	40-R	13	49°			B

Dome Temp. 40° @ 73 %

Focus 40-R

Dome Temp. 45° H=81% outside

Transparency Conditions Good but sl. Haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h 42E	+14 48	2"	8.10	BSIII	15-15-15	Sp Bin-Bln	400/110		fair
04 00W	+29 42	2½-3"	8.7	SF3	15-12-11	"	400/90	*overdevelop(at far right box)	doesmarks
00 06E	+32 36	"	6.26	KOIII	15-15-15	Hd Sp Bin	200/100		fair
								MWP2 7 min 064°F	
0 43W	+75 25	2-3"	6.84	F0	15-15-15	"	200/80		guiding
1 10W	+77 40	"	6.66	A0	15-15-15	"	200/62		fair
1 06E	+13 17	3"-4"	6.1	B8IV	15-15-15	"	200/61		Guiding
0 11E	+15 27	2-4"	6.34	M2III	15-15-15	"	200/100		fair
	min/out of				5/5	no filter			

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Date 1974 May 29/30 WED/THUR **Observer** Bl.-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38247	HD130841	$14^H\ 45^M.4$	$-15°\ 38'$	6-12	IIIa-J B	13/1.7	60°F	22:53	23:06	A
38248	HD130819	$14^H\ 45^M.4$	$-15°\ 38'$	6-12	IIa-O B	13/1.5		23:09	23:53	B
38248T1, T2, T3, Col stp refe		"	90 sec		"	"			MWP2	
38248T4, T5, T6, "		"	180 sec		IIIaJ-B	"				
38249	HD141513	15 44.0	-3 07	6 12	IIIaJ-B	13/1.7		23:57	00:14	C
~~HD167771~~		~~$18^H\ 11^M.6$~~	~~$-18°\ 30'$~~	~~6 12~~	~~IIaO-B~~	~~13/1.5~~		~~00:20~~		~~A~~

Dome Temp. ..... 88°

Focus 20R

Dome Temp. .....

Transparency Conditions ..... Hazy -> cloudy

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.06	h	00h 29m W	-15° 53'	2	2.89	Am	3-3	Sp. Bin - Blu	40/75		fair
2.53	2	01 16 W		2-5	5.57	FS IV	15-15	Vis Bin	280/80		fair
10/12		Dew 7 min @ 68°F				(T2, T3, T5, T6 For		Warrens'	use s are at the		
		Dew 7 min @ 68°F				right of	Ex box;	at far right are 2 unknown plates ??			
0114	C	00 38 W	-3° 18'	2-3	3.50	AO V	2-2-2	Sp Bin - Blu	40/75		fair
	f.	~~-18° 26'~~			~~6.63~~	~~07 III~~	~~15~~	~~Sp. Bin - Blu~~	~~100~~	cloud - [illegible]	

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* Ir IIaJ (unbaked but evacuated)

Date 1974 May 30-31 Thurs-Fri **Observer** Ir-Tn **Julian Day**

Plate No.	Object	R.A. 1900 74	Declination 1900 74	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38250	MOON (	12 38.3	−9 35	G12	IIaJ *	13/1.7		0:28	01:07	A
38251	HD 124897	14 11.1	+19 42	"	"	13/1.35	61°	1:20	01:24	B
38252	"	"	"	"	"	"		1:26	02:00	C
38252T	Calstar wedge		180sec		"					
38253	HD 197989	20 42.2	+33 36	"	"	13/1.35		2:14	2:42	A

Dome Temp. 58°F H= 86%

Focus

Dome Temp. 55°F H= 92%

Transparency Conditions The moon was a ghostly galleon tossed upon cloudy seas.

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1.07	A	04 43W	−9°35' reversed	?	~1	G2 I	3-5	Ir - Giant	200/106	mountains between FOREGROUND ATLAS	no spectra clouds
1 24	L	03 26W	+19 19	2-3	1.29	K2 III	3-3-3	"	20/40	+ CRISIUM ARC	fr. wk
2:00	C	04 02W	"	"	1.29	K2 III	3-3-3	"	20/80		fr wk
			+					Dev (new open rock.)	8 min @ 69°;	MWP 2 D	
1 42	A	01 45E	+33 52	"	3.48	K0 III	3-3-	"	40/70	E Cyg clouds	weak

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* Untreated

Date 1974 June 1-2 Sat-Sun **Observer** Bok, Kirk, Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour An End
38254	HD150100	16 33.9	+53 06	G12	IIaO bak	13/1.5		23 18	23 35	A	00 37
38255	HD150117	16 33.9	+53 08	"	"	"		23 41	23:51	B	00 51
38256	HD161797A	17 42.5	+27 47	"	"	"		00 06	00:12	C	01 10
38257	HD175588	18 51.0	+36 47	"	"	"		00 19	00:46	A	01 44
38257T	Col stop edge		90sec		"						
38258	NHA 328-116	19 55.0	+39 41	G12	"	13/1.4		00 50	02 20	B	01 12
38259	HD187638	19 45.9	+38 28	"	IIaO*	13/1.5		02 30	03 14	C	02 10
38260	HD172748	18 36.8	-9 09	"	"	"		03 18	03 35	B	01 19
38260T	Col stop edge		90sec		"						
38261	HD194093	20 18.6	+39 56	"	"	"	57°F	03 39	03 41		

Dome Temp. .....
Focus 20-R
Dome Temp. .....

Transparency Conditions high cloud - but good

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 35	A	00 37 E		3"	5·64	A0	15-15-15	Waterloo	200/65		V strong
2 51	B	00 21 E	+52 59	2-5"			15-15-15	"	200/60	Prob blend with HD150118	strong
0 12	C	01 10 E	+27 47	2"	4·20	G5 V	15-15-15	"	200/90		sl strong
0 46	A	01 44 E	+36 53	2-3"	5·94	MV III	15-15-15	"	200/224		Fair
										Dew 7 Mw C 60° 1 MW 82	
2 29	A	01 12 E	+39° 46'	2-3"	≈9	Em	15-15-15	Em Obj	800/25		Poor
2 14	C	00 10 E	+38 39'	"	7·0	G5 III	18-27-20	Waterloo	200/120		Fair
2 35	B	01 18 W	- 9 00	"	5·08	F3 III-IV	20-20-25	"	40/22		Fair
										Dew 7 Mw C 60° F MW 82	
1 41		C 15 E	+40 11	"	2·24	F8 V-6	25-45	"	40/≈25		Poor

* Only evacuated for 18h

Date 1974 June 2-3 Sun-Mon **Observer** Tn-Rln **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38262	HD137569	15 21.7	+15 03	G12	IIaO *	13/1.5	63°F	20:41	23:35	A
38263	HD141513	15H 44M.4	-3° 07'	G12	III-aJE	13/1.5		23:37	23:44	B
38264	HD167771	18H 11M.6	-18° 30'	G12	IIa-O *	13/1.5		23:48	00:44	C
38264T	Calstar wedge		90sec		"					
38265	HD190918	20 00.2	+35 31	G12	"	13/1.5		00:52	01:19	A
38266	HD201933	21 04.4	+29 48	"	"	13/1.7		01:25	01:37	B
38266T	Focus			"	"	13	61°F			B

Dome Temp. 63°F H=59%

Focus 20-R

Dome Temp. 58° H=75%

Transparency Conditions Cloudy

ding Time E.S.T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
35		00 37W	+14 49	1½-2"	7.9	B5 III	15-15-15	Sp Bin-Blu	200/65	16 1 12 1 Cloud 20:55-22:25->	fair
44		-3 24W	-3° 18'	"	3.50	A0 V	2-2-2	Sp Bin-Blu	40/52	broken 2 pcs	fair
0:49		01 04E	-18 24	2	6.63	07 III	15-15-15	Sp Bin-Blu	400/155		fair
										Dew MWP2 7 Min @ 68°F	
1:19		02 18E	+35 45	1½-3"	7.60	WN 4.5	15-15-15	"	400/130	#6	sucking
1 37		03 03E	+30 09		5.6	A0	15-15-15	"	200/86	Cloud back	fair + sucking
		"					5/5	no filter			

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* only evacuated

Date 1974 June 3-4 Mon-Tues **Observer** Th-Gfh **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38267	HD 141513	15 44.4	-3 07	G12	IIIaJ	13/1.5	68°	20:39	20:53	A
38268	HD 137569	15 21.7	+15 03	"	IIaO *	13/1.5		21:00	22:18	B
38269	HD 130841	14 45.4	-15 38	"	IIIaJ	13/1.7		22:24	22:36	C
38270	HD 130819	14 45.2	-15 35	"	IIaO *	13/1.5		22:40	22:50	A
38271	HD 167771	18 11.6	-18 30	"	"	"		23:13	00:25	B
38271 T	Cal step wedge		90sec		"					
38272	DR Vul	20 09.6	+26 27	G12	"	13/1.5		00:32	03:05	C
38272 T	Cal step wedge	180sec			IIIaJ					
38273	HD 200775	21 04.4	+59 48	"	IIaO *	13/1.7	61°	03:09	03:33	B

Dome Temp. 67° H=67%

Focus 15-R

Dome Temp. 54° H=88%

Transparency Conditions Hazy - some cloud

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:53	A	02 24E	-3 18	2"	3.50	A0 V	2-2-4	Sp Pairs - Blu	40/48		fair Sunday
2:18	E	00 37E	+14 49	1-2"	8.10	DS III	13-12-13	"	400/120	filter damaged, so trace lost used	fair Sunday
2:36	C	00 18W	-15 53	2"	2.49	Am	2-2-2	"	40/73		fair
2:50	A	00 37W	-15 49	3-4"	5.57	F5 IV	13-13-13	"	40/13		fair
3:25	E	01 20E	-18 24	"	6.63	O7 III	13-13-13	"	400/145		Sunday
										DW 1mm CO+ MWR2	
3:55	C	00 35E	+26 43	1-2"	8.6-9.3	K7	14-13-13	"	800/230	Cloud	fair wk
										MWR2 Dist 1mm to 60%	
4:33	E	01 00E	+30 08	2-3	5.6	A0	14-13-14	"	200/2	Twilight beginning	fair

* only evacuated

Date 1924 June 4-5 Tues/Wed **Observer** Hu-Tn-Kz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38274	HD 142926	15 52.1	+42 51	G12	IIIaJ	9/1.5	68°	20:47	21:55	A
38275	HD 152224	16 47.0	+32 44	"	IIaO*	13/1.5		22:22	23:10	A
38275T	Cal step wedge		90sec		"					
38276	HD 153720	16 56.0	+75 34	G12	"	13/1.5		23:18	23:50	B
38277	HD 164228	17 00.9	+77 48	"	"	"		23:53	00:20	C
38278	HD 186547	19 39.9	+13 04	"	"	"		00:28	00:58	A
38279	HD 196658	20 00.9	+15 13	"	"	"		01:03	02:55	B
38280	HD 216494	22 48.2	-12 09	"	"	"		03:00	03:47	C
	Observed Moonrise * on Jupiter (Sat I)							04:01		
	* no, we weren't on Jupiter, the moon was									
	3 moon Jupiter's moons was or something									
								1:10 that,		

Dome Temp. 73° H= 67%

Focus 15-R

Dome Temp. 65° H= 86%

Transparency Conditions Good but some haze

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21'55	01 25E	+42 40	2"	5.6	Be	2-3-2	Hd SpBin	200/350	4 Her (Δ ~ 0.8")	fair
22'10	01 04E	+37 22	1½"	6.26	K0III	15-15-15	"	400/200	broken 2=pss	fair
									Dew 7min @ 68°F on WP2	
23 50	00 30E	+75 33	1"	6.84	F0	15-15-15	"	400/160		fair
00 10	00 03E	+77 42	2"	6.66	A0	15-15-15	"	200/65		fair
00'29	02 10E	+13 18	"	6.1	B8IV	15-15-15	"	200/70		fair
02'55	00 34E	+15 27	"	6.34	M2III	15-15-15	"	200/150		weak
03'42	02 29E	-11 40	3"5"	5.9	B9V	15-30	"	200/50	down again	weak

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Date 1974 June 5/6 WED/THUR Observer Bln-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38281	HD 104451	$11^{H}56^{M}6$	$+30°06$	G-12	IIa O-B	20/.3	74°F	20:51	23:33	A
38282	DR Vul	$20^{H}09^{M}.6$	$+26°27'$	G-12	IIa-O B	20/.3		23:40	03:40	E

Dome Temp. 68° H=80%

Focus 0

Dome Temp. .....

Transparency Conditions Very Hazy | Some cloud all night. Increasing toward dawn.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3h 54m 12m W	+29° 45'	1-2	8.7	gF3	15-15.5	Sp Bin-Bln	800/210	OVERDEVELOP	Poor
00h 07m W	+26° 41'		8.6-9.3	B8	15-15.5	Sp. Bin-Bln	800/210	SLIGHTLY	Fair

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Date 1974 June 6/7 Thurs-Fri **Observer** Hu-Ri-Kz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38283	HD152224	$16^h\ 47.^m0$	+32° 44	G-12	IIa O-B	131.5	70°F	20:50	22.07	A
38284	HD 153720	16 56.0	75 34	"	"	"		23:48	01:31	B
38285	HD 186547	19 39.9	+13 04	"	"	"		01:44	02:49	C
38086	HD 198183	20 42.5	+36 07	"	"	13/.7		03:00	03:18	A
38286T1	cal step wedge				IIa O-B	90 sec				

Dome Temp. 53° @ 72%

Transparency Conditions hazy + clouds

Focus 052

Dome Temp. 50°F 78%

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 07	02h00mE	+32°28'	3-4	6.26	K0 III	15-15-15	Sp Bin - Hd	20/60	clouds overdevelop plans	
01 31	01 20W	+75°28'	3"	6.84	F0	15-15-15	"	400/161	haze at end	
02 49	00h11E	+13°20'	3"	6.1	B8 III	15-15-15	"	400/120		
03 18	00h45E	+36°25'		4.42	B5 V	15-	Sp Bin-Bln	80/26	(no time for III a J) λ Cyg Clouds again overdevelop	

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Date '74 June 7/8 Fri-Sat Observer Ri-Rak Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38287	HD 110411	12h 36.8m	-10° 47'	G-12	IIIaJ-E	13/1.5	68°F	20:48	21:32	A
38288	HD 141458	15h 44.1	+13° 01	G-12	IIaOB	13/1.5		21:38	22:22	B
38289	HD137569	15h 21.7m	+15° 03	G-12	IIaOB	13/1.3		22:29	00.36	C
38290	HD190918	20 02.2	+35 31	G-12	IIaOB	13/1.3		00:56	01:33	A
38291	HD201433	21 04.4	+29 48	G-12	IIaOB	9/1.7		01:39	02:29	B
38291T1	cal step wedge				IIIaJ	150 sec				
38291T2	cal step wedge				IIaOB	90 sec				

Dome Temp. 65°F 74%

Transparency Conditions hazy

Focus 15R

Dome Temp. .....

ding Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 32		01h38W	+10°28'	4"	4.97	A1 II	2-2-2	Sp Bin - Blu	40/50		
2 32		00h38E			6.80	A0	15-15-15	Sp Bin - Blu	400/120		
3 36		01h58W	+14°51'	3-4	8.10	B5 III	15-15-15	Sp Bin - Blu	800/260		
1 33		01h45E	+35°45'		7.60	WN4.5 +O9.5Ia	15-15-15	Sp Bin - Blu	800/220		
2 27		01h52E	+30°08'		5.6	A0	15-15	Sp Bin - Blu	450/85	clouds ~ 2:10 overhead	

273 Visitors

Date 74 June 8-9 Sat/Sun **Observer** Ki - Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38292	HD 167771	18h 11.6	-18 30	G-12	IIa-O B	13/.5	69°F	22:53	01:31	A
38293	HD 201433	21 04.4	+30 05	G-12	IIIa-O C	9/.7		01:40	02:33	A
3829371	cal slips wedge				IIa-O B	90 sec				

Dome Temp. 55°F 89%

Focus 15 R

Finder was two miles out of focus it was alright last night

Dome Temp. 55°F 82% outside 96%

Transparency Conditions haze + clouds from SW in and out

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h07W	-18°24	3-5	6.63	07	15-15-15	Sp Bin Pleiades	800/300	capped for 20 min hazy + clouds @ 23:45	
1h45E	+30°08	3	5.6	A0	15-15-	Sp Bin Pleiades	440/180	clearing up at 0:30 clouds again	
								some clipped by Fr - Sat on the right	

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Date June 9-10 1974 Sun Mon **Observer** Ri - Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38294	HD 104451	$11^h 56^m.6$	$+30° 06'$	G-12	IIaO B	20/.3	76°F	20:55	22:41	A
38295	HD 141213 μ Sco	$15^h 44^m.4$	$-3° 07'$	G-12	IIIaJ-E	13/1.7		22:46	23:00	B
38295T1	red step wedge				IIIaJ E	180 sec				
38295T2	blue step wedge				IIaO B	90 sec				
38296	DRVuL	$20^h 09^m.6$	$+21° 27'$	G-12	IIaO B	13/.5	74°F	23:10	01:16	C

Dome Temp. 60°F 81% outside 80°F 73% Transparency Conditions hazy - clear - cloud

Focus 05 B

Dome Temp. 60°F 82%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3^h 35^m W	+29 44	2	8.7	gF3	15-15-15	Sp Bin Plan	800/250		
04 07 W	-03° 18'	2	3.5	A0 V	2-2-2	"	40/80		
02 10 E ? X	+26° 41'		8.6-9.3	B8	15-30	"	80/105	overlapping plane clouds at 00:30	
02 02 E									

Date June 10-11 Mon-Tues Observer Ri - Gn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38297	HD 141673 Meer	15h 44m.4	-3° 07'	G-12	IIIaJ-E	13/1.7	76°F	20:45	21:17	A

Dome Temp. 60°F 59% outside 72°F 62%

Transparency Conditions .....

Focus 05 B

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 41 E	-030 18'		3.5	AOI	2-1½-2	Sp Pair pha	40/42	overdevelop plates clouds - capped	

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Date Jun 12-13 Wed-Thur Observer Gn - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38298	HD 104451	$11^h 56^m.6$	$+36° 06'$	G-12	D00-6	18/.4	61°	20:57	23:51	A
38299	HD 141513	$15^h 44^m.4$	$-3° 07'$	G-12	IIIaJ-E	13/.7		00:31	01:28?	B
38299T	Col stop + edge	180sec			"					
38300	HD 141458	15 44.1	+13 01	G12	D00-6	13/.5		01:32	02:16	C
38300T	Col stop + edge	90sec			"					
38301	HD 212154	$23^h 00^m.6$	+24 07	G12	"	13/.5		02:21	03:22	A
38302	HD 201453	$21^h 04.24$	$+29° 45'$	G12	"	13/.7		03:25	03:42	B
38302T	Focus			"		13	54°			t
						should be set 36-R				

280

Dome Temp. 57°F H=67%

Transparency Conditions clear Excellent Zenith

Focus 30-R

Dome Temp. 49° H=67% small fireball at 22:45 - good trail 2 2 occ thru Cyg - SW - NE

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:51		5h W	+29 44	2-3"	8.7	gF3	14-15-15	Sp Pair Pl	400/125	cloud	
2:01		2 48W	-3 17	obscene	3.5	A01	2-2-2	"	40/75	some cloud (4 Ser)	
2:16		3 36W	+12 51	2-4"	6.80	AO	15-15-15	"	400/120		
		2 35E	+24 34	"	7.01	AO	15-15 15	"	400/125		
		3h 17E	+30 08	"	7.6	AO	15-15-15	"	40/18		
			in Sq Pair				3/3	no Her			

Date June 13/14 Thurs-Fri **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38303	HD 141458	15 44.1	+13 01 ~~+12 50~~	G12	IIaO-b	9/.5	60°	00:04	01:20	A
38303 T	Co [illegible]	[illegible]			"					
38304	HD 186547	19 39.9	+13 04	"	"	13/.5		01:25	01:56	B
38305	HD 190658	20 00.9	+1[illegible] 13	"	"	"	57°F	02:00	03:38	C

Dome Temp. 55 °F @ 76%

Transparency Conditions scattered cirrus

Focus 30-R

Dome Temp. 54°F 92%

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02 44W	+12 51	2-3	6.80	A0	15-15-15	Bin Sp Bin	400/120	cloud at end (last 10 min)	
1:56		00 36E	+13 17	1-2"	6.1	B8 V	15-15-15	Hd Sp Bin	400/120	cloud	
2:38		00 4-W	+15 29	1-2"	6.34	M2 III	15-15-15	"	400/300	cloud	

Date June 20/21 Thurs-Fri **Observer** Hu-Tu-Ka **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38306	HD141458	15 44.1	+13 01	G12	IIaO-b	9/.5	72°	20:52	21:33	A
38307	HD186547	19 [illegible]	+1304	"	"	13/.5		21:38	22:20	B
38307T	Cu [illegible]	[illegible]			"					
	HD 153720	16 56.0	+75 34	"	"	13/.5		22:30		C
F1	Focus Test			"	"	13	71°F	in in / out out		E
F2				"	"	"	"			D
F3				"	"	"	"			K
F4				"	"	"	"			F
F5						"	"			G
F6						"	"			P
F7						"	"			C
F8						"	"			[illegible]

Dome Temp. 74°F H=67% outside
Focus 10-R north Pier temp - 54°F
Dome Temp.

Transparency Conditions Hazy - [illegible]

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 22	A	00 36 E	+12 50	1-2"	6.80	AO	15-15-15	Spkm-Bkn	400/120		
2 20		33 45 E	+13 17		6.1	B8V	15-15-15	Spkm-40	400/120		
	C	Δ Ave			6.84	FO	15-	"	400/		
		+3	10-R	[illegible]			3/3	no filter	normal	from 20-R - 10-R	
		+12.8	60-R	increasing in red			3/3	normal Sp	10-R-60-R		
		+15.8	90-R	"	"	"	3/3	" "	60-R - 90-R		
		+25.8	90-R	increasing in	black		3/3	" "	90-R → 20-R [illegible] & 90-R black [illegible]		
		+15.8	60-R	"	"	"	3/3	"	90-R-60-R	* temp in previous days	
		+ 6.8	10-R	"	"	"	3/3	"	60-R-10-R	was 10°-25° Less in [illegible]	
		- 5.5	20-B	"	"	"	3/3	"	10-R → 20B		
		-4	20-R	increasing		Red	3/3	"	20-R - 50-R → 20-B		

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Date June 21/22 Tue-Sat / 54 **Observer** Tn - Kz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38308	HD 104451	11 56.6	+30° 06	G12	Do 1-6	18/.4		21:11	23:07	A
38309	HD 141458	15 42.1	+13 01	"	"	9/.5	67°	23:13	23:58	B
38310	HD 167771	18 11.6	-18 30	"	"	13/.5	65°	00:01	00:53	C
38310 T	Cal step wedge 90sec				"					
38311	Dr Vul.	20 09.6	+26 27	"	"	20/.5		01:08	02 38	A
38312	HD 186547	19 39.9	+13 04	"	"	13/.5		02:42	03 05	B
38313	HD 201433	21 04.4	+29 48	"	"	9/.7		03:08	03 34	C
	Jupiter	21 [illegible]	-6 [illegible]	Just [illegible]						

Dome Temp. 68° H-68°

Focus 10-R

Dome Temp. 58° H-85°

Transparency Conditions Very good → Excellent

9°-5 Excellent, Photometric cf

ding Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1.07		1 24 50W	+30 14	3-4"	gF3	8.7	15-15-12	Sp Bin-Hg	800/180	cut short (bad balance & wind)	
58		01 52W	+12 51	2-3"	A0	6.80	15-15-15	"	400/125		
0:53		00 21 W	-18 24	3-4"	07 F	6.63	15-15-	"	200/75		
2.28		00 08 W	+26 44	3-4"	B8	8.6-9.3	15-15-15	"	400/130		
2.15		01 05 W	+13 21	"	B8 F	6.1	15-15-15	Sp Bin-Hg	200/60		
3.3-		00 10 W	+30 10	2"	A0	5.6	18-12-15	Sp Bin-Hg	200/85		

287 Visitors till 22:40

Date JUNE 22-23/SAT-SUN/1974 Observer TN-WEST Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38314	"D187691	$19^h 46.^m2$	+10° 10'	G12	IIaO-hyp	13/15	65°F	$22^h 48^m$	23 14	A
38315	ADS14893	$21^h 16.^m5$	+09°55'	"	"	"		23:22	01:49	B
38316	ADS 14893	$21^h 16.^m5$	+09°55'	"	"	"		1:50	03:31	C
38314T	Calibration Spectra	90sec			"			-		
38317	LDIS (SM)	$23^h 34.^m9$	+05°05'	G12	"	12/15		3:35	03:42	A

Dome Temp. 57° 1-33 outside

Focus R-15

Dome Temp. 61° H=86%

Transparency Conditions Poor to fair

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 14	A	02 50E	+10 27	3"-4"	5.8	F8 I	15-15-15	M 31 star	200/85		
1 49	B	01 45E	+10 18	3"	7.3	F7 I	15-15-15	"	400/160	cloud	
3 31	C	00 02E	"	3"-5"	"	"	15-10-15	"	400/130	hazy	
3 42	A	02 10E	—	4"-8"	5	F	15-	"	40/16		

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Date 23/24 JUNE '74 SUN/MON **Observer** Blu-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38318	HD170073	$19^H 22^M.5$	$+58° 45'$	G-12	IIIa-JE	13/1.5	64°F	20'50	21:09	A-
38319	HD153720	16 56.0	+75 34	"	I-60-b	"		21:15	22:00	B
38319T	Calstrip wedge	98sec			I-60-b					
38320	HD130841	$14^H 45^M.4$	$-15° 38'$	G-12	IIIa-JE	13/1.7		22:04	22:21	C
38321	HD141513	$15^H 44^M.4$	$-3° 07'$	G-12	IIIa-JE	13/1.7		22:24	22:36	A
38322	HD137569	$15^H 21^M.7$	$+15° 03'$	G-12	IIa-OB	13/1.3		22:39	23:27	B
38323	HD152614	$16^H 49^M.3$	$+6° 20'$	G-12	IIIa-JE	13/1.5		23:30	23:40	A
38324	DR Vul	$20^H 09^M.6$	$+26° 27'$	G-12	IIa-OB	20/1.5		23:45	01:05	B
38324T	Calstrip wedge		180sec		IIIaJ					
38325	HD201433	$21^H 04^M.4$	$+29° 48'$	G-12	IIa-O3	13/1.9		01:07	01:17	C
38326	HD200775	$21^H 00^M.4$	$+67° 47'$	G-12	IIa O B	13/1.5		01:24	02:10	A
38327	HD177724	$19^H 00.8$	$+12° 43'$	G-12	IIIa-JE	13/1.5	59°F	02:15	02:20	B
38327F	Focus				I-N	13				F

Dome Temp. 58° F H=78%

Focus 15 R

Dome Temp. 85?

Transparency Conditions Cloud from N-E but very good otherwise

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:69		03 25E	+58 49	3"4"	4.93	A1V	2-2-2	Sp, Bin-Blu	40/52		
:13		01 06E	+75 28	"	6.84	F0	15-14-15	Sp, Bin-Hd	400/160		
:21		01 30W	-15° 51'	5-10	2.89	Am	3-2-2	Sp, Bin-Blu	40/75		
:36		00 32W	-3° 16'	4-7	3.50	A0V	2-2-2	Sp, Bin-Blu	40/75		
:37		01 52W	+14°52'	4	8.10	B5III	15-15-15	Sp, Bin-Blu	400/80		
:14		00 38W	+10 17	3"	4.30	B8V	2-2-2	Sp, Bin-Blu	40/52		
:55		01 18E	+26 45	2"3'	9.6-9.3	B8	15-15-15	Sp, Bin-Blu	800/260		
:17		02 00E	+30 11	2"	5.6	A0	15-15-15	Sp, Bin-Blu	80/44		
:10			+62 06	"	7.73	B5e	15-15-15	Be prog	400/120		
:26		01 05W	+13° 54'	1"2"	3.01	A0Vnn	2-2-2	Sp, Bin-Blu	40/50		
							3-3				

Date 26-27 June 74 Wed-Thurs Observer Ri- Gm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38328	HD 141513	15 44.4	-3 07	G-12	IIa-O	9/.9	64°F	20:57	21:03	A
38329	HD 167771	18 11.6	-18 30	G-12	IIa-O	13/.5		21:12	22:28	B
38330	DQ Vul	20 09.6	+26 27	"	"	13/.5		22:38	01:46	C
38330T1	col sep wide				IIaO	90 sec				
38331	HD 200775	21 00.4	+67 47	"	"	13/.5		01:54	02:40	A
38332	HD 206859	21 35.9	+57°02	"	"	13/.9		02:48	03 04	B
38333	HD 201433	21 04 24	+29 48	"	"	9/.9		03:12	03 30	C
38333F1	focus test					9	61°F			B

Dome Temp. 50°F 74%

Focus 15R

Dome Temp. 49°F 83%

Transparency Conditions clear → cloud ~ 0h → clear

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h 44E	-3° 21'	2	3.5	A0 V	15-15-15	Sp Bin Blue	4/22		fair
1h 48E	-18° 27'		6.63	O7 V	15-15-15	"	400/130		fair
0h 25E	+26° 44'	2-3	8.6-9.3	G8	15-15-15	"	800/265	clouds for about 1 hr.	fair
			7.73	B5e		Be Tgs		Dew 8 min @ 68°F mw 2 h	
0h 19E	+68° 05'	2	7.73	B5e	15-15-15	Be Progs	400/120		fair
?	+57° 24'	2	5.83	O6	15-15-15	Sp Bin Blue	80/53		sl. cloudy
0h 24W	+30° 09'	2	5.6	O	15-15-15	"	80/44		sl. cloudy
					3-3 no filter			15R	

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Date 27-28 Jun Fri 1974 **Observer** Hu-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38334	HD 152724	16h 47.0	+32° 44	C-12	IIa O B	13/.5	66°F	20:54	21:31	A
38335	HD 186547	19 39.9	+13 04	"	"	"		21:36	22:04	B
38336	HD 154528	17 00.9	+77 48	"	"	"		22:11	22:38	C
38337	HD 190658	20h 00.9	+15° 13'	"	"	"		22.44	00:25	A
38337T1	ccd step wedge				IIa O B	90sec				
38338	HD 214946	22h 36.7	+44 29	"	"	"		00:30	01:06	B
38339	HD 216494	22h 48.2	-12° 09	"	"	"		01:12	01:42	C
38340	HD 225093	23 58.3	+72 36	"	"	"		01:53	02:48	A
38341	HD 186547	19 39.9	+13 04					02:54	03:24	B
38341F1	focus test				IIa O	13	61°F			B

Dome Temp. 50°F 74%

Focus 0

Dome Temp. 48°F 80%

Transparency Conditions photometric, excellent transparency

ling Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
31		01h14E	+32°40′	3	6.26	K0 III	15-15-15	Sp 3 in - H2	400/200		fair
04		03h34E	+13°20′	3-4	6.1	B8 IV	15-15-15	"	400/140	overexposed to compensate for large east H.A.	fair
38		00h15E	+77°44′	3	6.66	H0	15-15-15	"	400/120		fair
25		01h33E	+15°30′	3	6.34	M2 III	15-15-15	"	400/300		fair
										Dew 8 mm @ 69°F MWP2	
26		03h28E	+44°55′	3	7.12	A2	15-15-15	"	400/120		fair
42		03 03E	−11°40′	3	5.9	B9 V	15-15-15	"	400/120		fair
48		03h08E	+73° 05′	3	7.52	A2	15-15-15	"	400/120		fair
34		01h47W	+13°20′		6.1	B8 V	15-15-15	"	400/123	west H.A.	fair
							3-3 N filter			nothing 0	

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Date 1974 JUNE 30/JULY 1 SUN/MON **Observer** Bl-R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38342	HD141457	15H 44M.1	+13° 01	G-12	IIa-OB	9/1.5	68°F	20:58	21:39	A
38343	HD141513	15H 44M.4	−3° 07′	G-12	IIa-OB	9/1.9		21:42	21:46	B
38344	HD153720	16H 56.0	+75° 34	G-12	IIa-OB	13/1.5		21:53	22:26	C
38345	HD170073	18H 22M.5	+58° 45′	G-12	IIa-OB	13/1.9		22:31	22:38	A
38346	HD188209	19H 49M.0	+46° 46′	G-12	IIa-OB	13/1.7		22:41	22:50	B
38347	HD163472	17H 51M.2	+0° 41′	G-12	IIa-OB	13/1.7		22:56	23:11	C
38348	HD163472	17H 51M.2	+0° 41′	G-12	IIa-OB	13/1.7		23:12	23:27	A
38349	HD163472	17H 51M.2	+0° 41′	G-12	IIa-OB	13/1.7		23:28	23:44	B
38350	HD163472	17H 51.2	+0° 41′	G-12	IIa-OB	13/1.7		23:45	00:00	C
38351	HD163472	17H 51.2	+0° 41	G-12	IIa-OB	13/1.7		00:01	00:17	A
38352	HD163472	17H 51M.2	+0° 41′	G-12	IIa-OB	13/1.7		00:18	00:37	B
3835271	cal step wedge	for plates	38342-38352		IIa-OB	90 sec				
38353	HD163472	17H 51.2	+0°41	G-12	IIa-OB	13/1.6		00:38	00:51	C
38354	HD163472	17H 51M.2	+0°41′	G-12	IIa-OB	13/1.6		00:53	01:15	A
38355	HD163472	17H 51M.2	+0° 41′	G-12	IIa-OB	13/1.5		01:17	01:31	B
38356	HD163472	17H 51M.2	+0° 41′	G-12	IIa-OB	13/1.5		01:32	01:48	C

Dome Temp. 54°F 73%

Focus O.R

Dome Temp.

Transparency Conditions

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:39		04:10 W	+12 53	3	6.80	A0	15-15-15	Sp. Bin - Blu	400/120		fair
.46		04:15 W	-03°16		3.50	A0 V	22-22	Sp. Bin - Blu	40/20		fair
:26		00"10 E	+75°29'		6.85	F0	15-15-15	Sp. Bin - Hd	400/160		fair
3:38		01"28 E	+58° 50'		4.93	A1 V	22-22	Sp. Bin - Blu	40/23		fair
3:50		02 45 E	+47°00'		5.54	09.5 III	15-15-15	Sp. Bin - Blu	80/35		fair
3:11		00 27 E	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/35		fair
3:27		00 11 E	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/35		fair
3:44		00° 06 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/35		fair
0:00		00" 23 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/33		fair
0:17		00 41 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/35		fair
0:32		01 00 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/35		fair
										Dew Comm. @ 3:30 AM MST	
0:51		01 18 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/30		fair
1:15		01 32 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/30		fair
1:31		01 54 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/25		fair
1:48		02" 11 W	+00° 45'		5.67	B2 V	15-15-15	Py - Blu *	80/25		fair

297 #2

Date 1974 July 1 Sun Comet **Observer** B/A - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
38357	HD163472	$17^h 51.^m2$	+00° 41′	G-12	IIa-0B	13/.5		01 49	02:05	A
38358	HD163472	$17^h 51.^m2$	+00° 41′	G-12	IIa-0B	13/.5		02:06	02:22	B
38359	HD163472	$17^h 51^m.2$	+00° 41′	G-12	IIa-0B	13/.5		02:23	02:38	C
38360	HD163472	$17^h 51^m.2$	+00° 41′	G-12	IIa-0B	13/.5		02:39	02:58	A
38361	HD190918	$20^h 02^m.2$	+35° 31′	G-12	IIa-0B	13/.3		03:04	03:47	B
38361T1	cal step wedge	for plates 38353-38361			IIa-0B	90 sec				
38361F1	focus test	out out/in in			IIa 0	13	64°F			B

Dome Temp. 49°F 77%

Focus 0 R

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02:05	A	02h29W	+00° 45'	4-5	5.67	B2 I	15-15-15	Py - Bln*	80/25		fair
02:22	3	02 45W	+00°45'		5.67	B2 I	15-15-15	Py - Bln *	80/25	1" broken off	fair
02:37	3	03 01W	+00°45'		5.67	B2 I	15-15-15	Py - Bln *	80/25		fair
02 58	A	03 20W	+00° 45'		5.67	B2 I	15-15-15	Py - Bln *	80/25		fair
03 47	3	03 10W × 03 00W	+35° 37'		7.60	WN 4.5 B9.5 Ia	15-15-15	Spec Bin - Bln	800/200	? Probably Field Drawn BD + 35° 3955 (#4)	fair
										Dew 8 min @ 68°F mWP2	
	3						3-3 no filter			setting 0	

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'74

Date July 1 - 2 Mon-Tues **Observer** Ri - Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38362	HD 141458	$15^h 44.^m 1$	$+13° 01'$	G-12	IIa-0 E	9/.5	72°F	20:56	21:32	
38362T1	cal atm wedge				IIaO E	90 ea				

300

Dome Temp. .....

Transparency Conditions ..... clear → X .....

Focus ..... 10 B .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h 7 W	+12053'	1½"	6.80	A0	15.30	Sp Rim Flm	400/53	overdevelop 1 hour clouds "New Emul. 1E4"	weak
								MWP2b (v 69°/= Dev 10 min	
								the nebulosity did not	
								known which one	
								is it still Rosé?	

Date July 3-4 U.T. Observer Lam-Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38363	K Oph	16 36.3	+09 26	G-12	IIa-OB	9/.9	76°	21 36	21:52	A
38364	HD156283	17 14.1	+36 50	"	"	"		22:02	22:13	A
38365	HD161797	17 45.3	+27 45	"	"	"		22 17	22:30	C
38366	HD162714	17 57.4	−09 47	"	"			22 35	23:04	A
38367	HD168723	18 19.7	−02 54	"	"	"		23 08	23:36	B
38377	Col-Hyades	90 soc			"					
38368	HD182640	19 24.0	+0303	"	"	"		23:41	23:59	C
38369	β Cyg A	19 29.5	+27 54	"	"	"		00:03	00:19	A
~~38370~~	α Aql	19 49.3	+8 47	"	"	"		~~00:24~~	00:34	B
38370D	HD187642	19 49.3	+8 47	"	"	"		00:29	00:33	C
38371	HD191692	20 09.8	−00 54	"	"	"		00:41	00:52	A
38372	β Cap A	20 19.3	−14 53	"	"	"		01:04	01:24	B
38373	HD207098	21 43.4	−16 16	"	"	"		01:31	01:49	C
38374	HD209750	22 04.2	−00 28	"	"	"		01:58	02:19	A
38375	HD215182	22 41.6	+30 04	"	"	"		02:25	02:38	B
38376	Focus Test			"		"	73° F			

Dome Temp. 62°F 91% inside

Focus .....

Dome Temp. 60°F 91% inside

74° outside

at 2:30 AM

Transparency Conditions ..... haze

Ex meter unstable

(overload not in effect at beginning)

Reading Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:52	A	00 34E	+09 29'	2"	4.33	K2 III	15-15-15	Br Star	200/180		
2 13	A	00 32E		1-2"	4.56	K3 II	15-15-15	"	200/180*	Flip had in alt ? # Her	
2 30	C	00 47E	+27 49	2"	4.17	G5 IV	15-15-15	"	200/160	M Her A	
2:04	A	00 24E		3-4"	4.32	G 9 III	K-1145	"	200/158		
3:36	A	00 14E	-2 48	2-3	4.17	K0 III-IV	15-15-15	"	200/180	cloud	
2:50	C	00 55E	+3 08	"	3.69	F0 IV	15-15-15	"	200/150		
06:19	A	01 10E	+27 58		4.19	K3 II	15-15-15	"	200/180		
		01 06E	+08 52	"	.99	A7 IV-V	22-22	"	~~40/27~~	Prob blend ? short exp low	
01 33	C	00 ~~50E~~	+08 52	2	.99	A7 V	22-22	"	40/26 !!	Low alt 71 α Aql	
00:52	A	00 47E	-00 50	2	3.24	Ba5 III	15-15-15	"	200/126	X Lal ?	5 Sgl
				"	3.82	A+B	15-15-	"	200/143		
01:49	C	01 25E		"	3.21	A6 m	15-15-15	"	200/125	5 Cap	
02:19	A	01 19E	-00 22	"	3.92	G 2 V	15-15-15	"	200/160		
03:19	A	01 30E	+30° 04	1-2"	3.18	G8 III	15-15-15	"	200/179		
							7/3			set 15 h	

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* Dated July 4

Date 1974 July 5/6 FRI/SAT **Observer** Bln - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38376	HD141513	15H 44M.4	-3° 07'	G-12	IIIa-JE	9/1.7	69°F	20:50	21:06	A
38377	HD130819	14 45.2	-15 35	"	IIaO-B*	13/1.5		21:09	21:28	B
38378	V1016 Cygni	19H 53M.7	+39° 34'	G-12	IIa-F	20/1.3		21:46	00:45	C
38379	DR Vul	20:09.6	+26 27	"	IIaO-B*	17/1.3		01:07	02:28	A
38380	HD190918	20H 02M.2	+35° 31'	G-12	IIa-OB*	13/1.3		02:32	03:00	B
38381	HD 201433	21H 04M.4	+29° 49'	G-12	IIa-OB*	13/1.5		03:03	03:16	C
38382 T1	Comp. region	90 sec	for 38377	G-12	IIaO-B*					
38383 T2	" " "	150 sec	for 38376		IIIa-JE					
38382	HD213307	22 25	+57 54	G-12	IIaO-OB*	13/1.5		03:19	03:38	A
38382 T	Comp region	5 min	for 38382		IIaO-F					
38382 T	Focus Test			G-12		13	62°F			B
										C

Dome
Focus
Dome

Dome Temp. 63° H=79%

Focus 10-B

Dome Temp. 58° H=88%

Transparency Conditions Excellent

Aurora @ 21:45. Spectacular!! @ 22:35 streaks to S. Horizon - Zenith corona of 04 every bright Still Visible @ 03:40 Sys spectacular all night

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.06		00 05 E	-3 16	2-3	3.50	A0V	2-2-2	Sp. Bin-Blu	40/70		
29	B	01 16 W	-15 47	5-6	5:57	F5 IV	15-15-15	"	40/36		
0.45	C	00 32 E	+39° 49'	3-4	V=10.2	Em	No Filter 3-3-3	Ahn *	800/100		
3:18	A	00 54 W	+26 44	3	8.6-9.3	B8	15-15-15	Sp Bin-Blu	800/200	extreme - Bi Aurora	
2:00	C	01 33 W	+35 47	2-3	7.60	WN4.5 O9.5Ia	15-15-15	"	400/110		
2:16	C	00 47 W	+30 10	2"	5.6	A0	15-15-15	Sp. Bin-Blu	200/60		
3:38	A	00 11 E	+58 18	2'	6.3	B7	15-15-15	Sp Bin-Blu	200/60		
				10-B			3-3	no filter	(set with [illegible] Blue Fil)		

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Date 6/7 JULY 1974 SAT/SUN Observer Bln-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38383	DR Vul	20H 09M.6	+26° 27'	G-12	IIa-0B	13/1.3		22:05	23:20	A
38383T	Cal step wedge		90sec		"					
38384	HD129989	14 43.7 1900	+27 12	G12	"	9/.9		23:27	23:32	B
38385	β Boo	15H 00.8 1970	+40° 30'	G12	"	9/.9		23:37	23:44	A
38386	HD146791	16 16.7 1970	-4 38	"	"	9/.9	71°F	23:50	00:02	B
38387	V 1016 Cyg	19 52.4	+39 34	"	"	17/.3		00:08	03:05	C
38388	HD213307	22H 25M.5	+57° 54'	G-12	IIa-0B	13/.5		03:07	03:19	A
38389	HD201433	21H 04M.4	+29 48	G-12	IIa-0B	13/.5		03:21	03:30	B
38390	HD216627	22H 53.1 1970	-15° 59'	G-12	IIa-0B	9/.9		03:33	03:41	C

Dome Temp. 72° H=80%
Focus 10-B
Dome Temp. 65° H=81%

Transparency Conditions Fair - Poor. Lots of Cirrus
Cloud diffuse all night

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:30	A	02 11E	+26° 44′	2-3	8.6-9.3	B8	15-15-15	Sp. Bin-Blu	800/167	Cloud after 23:05 First 25 ctn @ F/5 slit	
3:32	B	03 30W		2°	3.34	K1 III	22-23	Br star	40/35		
3:46	A	03 24W		"	4.43	G8III	22-22	Br Star	40/37		
4:02	A	03 27W		2"-3"	4.19	G9III	22-22	"	40/36		
3:05	C	01 52W	+39 49	1-2°	6.2	Em	15-15-15	Abn Em *	800/118	hazy but good seeing	
3:19	A	00 26E	+58° 19′	1-2	6.3	B7	15-15-15	Sp. Bin-Blu	200/60		
3:30	B	01 05W	+30° 10′	"	5.6	A0	15-15-15	Sp. Bin-Blu	200/60		
3:41	C	00 30E	-15° 52′	2-3	3.36	A3V	22-22	Brt Str.	40/22		

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Date July 7-8 Sun-Mon **Observer** Tn-Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38391	β Lib	15 15.4(19m)	-09 16(5)	G12	IIaO-B	9/1.9	76°	20 48	20 55	A
38392	HD 137569	15 21.7	+15 03	"	"	13/1.5		21 02	22 10	B
38393	DR Vul	20 09.6	+26 27	"	"	13/1.5		22 17	00 00	C
38393T	Calibration	90cor			"					
38393F1	Focus Test			G12		13	73°F+			B
F2				"		"	"			B
F3				"		"	"			B

Dome Temp. 76° H-73

Focus 10-B

Dome Temp. 70 70

Transparency Conditions Suspicious clear & irony moon

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55	A	00 26W	-9 12	.2"	8.50	B8 V	15-30	Part Str	40/ ?	exposure meter not used] Corr hole	
10	C	01 30W	+15 08	2-3"	8.10	B5 III	15-15-15	Sp Rim Flm	400/128		
00		21 28E	+26 44	"	9 3	B8	15-15	Sp Rim Flm	800/	never untraviolet used for about 20 exp.	
										clouds	
	A		set 10-B				3/3	no filter		as was set since Fri-Sat	
	B		set 10-R				3/3	"		[back lash taken up	
	A		set 40-B				3/3	"		increasing black	

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* evacuated but not baked

Date 1974 July 8-9 Mon-Tues **Observer** Th-IF **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38394	HD113226	12^h 57.2	11° 30'	G-12	IIaO*	13/1.5	80°F	21:02	21:10	A
38395	HD101501	11^h 35.8	34° 46	G-12	"	"		21:14	22:10	B
38396	HD124897	14^h 11.1	19° 42'	"	"	"		22:16	22:19	C
38397	"	"	"	"	"	"		22:22	22:24	A
38398	HD157999	17 21.5	4° 14'	"	"	"		22:30	23:42	B
38399	HD180809	19 12.9	37° 57'	"	"	"		23:45	00:22	C
38400	HD201091	21 02.4	+38 15	"	"	"	77°F	00:27	02:00	A
38400T	Cal step wedge		90 sec	"	"		First batch			
38401	HD202109	21:08.7	29° 49	"	"	"		02:05	02:15	B
38402	HD198149	20:43.3	61° 27'	"	"	"		02:19	02:33	C
38403	HD164058	17 54.3	51° 30'	"	"	"		02:38	02:58	A
38404	HD206778	21:39.3	9° 25	"	"	"		03:06	03:26	B
38405	HD197989	20:42.2	33° 36	"	"	"		03:29	03:38	C
38405F	Focus Test			"		13	75°			
38405T	Cal step wedge		90 sec	"	"	"				

Dome Temp. 80° H-67%
Focus 18-8
Dome Temp. 73° H-92%

Transparency Conditions ..... Good but hazy

B

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
1:10	A	3h 00 W	11° 11'	2-3	3.74	G8III	15-15-15	I_1 - 6 limit	20/14	ε Vir	0.93	
2:10	B	5h 20 W	34°25'	"	6.07	G8V	15-15-15	"	200/110	61 UMa comparison not exact	0.72	
2:19	C	5h 53 W		3	1.29	K2III	450	"	20/17	Arcturus	1.23	
2:24	A	2 58 W		2"	"	"	"	"	20/30	"	"	
2:42	B	h 10 W	4°15'	1-2"	5.84	K2II	15-15-15	"	200/280	σ Oph	1.50	
2:4	C	0 05 E	38°07'	1"	5.61	K0II	15-15-15	"	200/210	θ Syr	1.25	
2.00	A	0 16 E	+38 40	2-3	6.38	K5V	15-15-15	"	200/220	61 Cyg A	1.19	
2:15	B	0 07 E	30° 11'	2	4.20	G8II	15-15-15	"	200/170	S Cyg	1.00	
2:33	C	0 28 W	+61 46	2-3	4.55	K0IV	15-15-15	"	200/170	η Cep	0.52	
2:58	A	0 35 W	51° 34'	3	3.74	K5III	15-15-15	"	200/320	γ Dra broken (2 pcs)	1.52	
3:26	B	0 32 W	9° 50'	2-3'	3.98	K2Ib	15-15-15	"	200/320	ε Peg	1.56	
3:4	C	1 42 W	33° 56'	2	3.48	K0III	15-15-15	"	200/170	ε Cyg	1.03	
		in contact					3/3	neutral	Set 18-8			
									*1	Blank (Trans)		
										in contact		

317 Perseus Group from Sunset to 22h

* EVACUATED ONLY

Date 1974 JULY 10-11 WED-TH **Observer** Cb-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38406	IC4756 #1 = HD 172365	18 34.7	+5 10	G12	IIa-O*	10/35	73°	22:03	23:09	A
38407	#6 = HD 171732	18 31.9	+5 12	"	"	"		23:15	01:06	B
38408	#2 = HD 171586	18 30.5	+4 52	"	"	"		01:09	01:51	C
38409	#3 = HD 172046	18 32.8	+5 50	"	"	13/15		01:58	03:05	A
38409T	Col stp wedge		90 sec		"					
38410	HD 201433	21 04.4	+29 46	G12	"	9/17		03:11	03:49	B
38410F	Focus Test			"		9	63°			B

Dome Temp. 66°F - 72°F

Focus 10-B

Dome Temp. 55°F 85%

Transparency Conditions CLEAR - Limiting

Strange Aurora Like cone glow in west from a 0h → 1:30 30° to West to Sun

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
09	/	0 32E	+5 18	5"	7.2	F9Ib	15-15-15	IC 4756	200/80		
36	/	01 28W	+5 20	3-5"	7.9	B9	15-15-15	"	400/110		
51	C	02 14W	+5° 00	2-4"	6.5	A0	15-15-15	"	400/150		
05	A	03 26W	+5° 57	3-4"	6.6	B8	15-15-15	"	400/160		
49	/	01 39W	+30 09	3-5"	5.6	B9V	15-15-15	Spec. Rich	200/100		
			set 10-B				3/3	nebular		sodium trap stop	

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† Evacuated only

Date July 11-12/1974 Thurs-Fri **Observer** Hu-Tn **Julian Day**

Plate No.	Start Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38411F	Focus			G12	IIaO	9	67°F			B
38411	HD 14458	15 44.1	+13 01	"	IIaO*	9/1.5		20:51	21:22	A
38412	HD 153720	16 56.0	+75 34	"	"	13/1.5		21:29	22:11	B
38413	HD 149803	16 32.0	+29 56	"	"	13/1.35		22:17	00:24	C
38413T	Cal strip no hg		90 sec		"					
38414	HD 194071	20 18.5	+27 55	G12	"	13/1.35	63°	00:31	02:09	A
38415	HD 153720	16 56.0	+75 34	"	"	13/1.5		02:13	02:55	B
38416	HD 154528	17 00.9	+77 48	"	"	"		03:01	03:32	C

Dome Temp. 62°F @ 68%

Focus 2-R

Dome Temp. 57°F · 89%

Transparency Conditions Very Good
occasional light haze

Coding Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	B		1st in focus +				3/4	no filter			
21'22	A	00 35W	+12 52	2"-4"	6.80	A0	15-15-15	Bln Sp Bin	400/120		
22'11	B	00 18W	+75 28	"	6.84	F0	15-15-15	Hd Sp Bin	400/160		
24	C	02 50W	+29 52	"	8.90	F7V	15-15-15	SSV	800/200		
							11-16	Dew	Ids 11 2nd total Dmi Mwpc @ 69°F		
11	A	00 44W	+28 14	2"-3"	9.06?	G8IV	15-15-15	SSV	800/250	Looks brighter (2 mags)	
02'55	B	25 03W	+75 25	"	6.84	F0	15-15-15	Hd Sp Bin	400/160	telescope reversed	
03'32	C	02 36W	+77 40	2"	6.0	A0	15-15-15	"	400/140	"	

37S #1

* Evacuated only

Date 1974 July 12-13 Fri-Sat **Observer** Jr-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38417F	Focus Test			G12			73°F			B
38417	HD124897	14 11.1	19°42'	"	~~IIaO~~ * actually IIIaJ *	13/.5	73°F	20:45	20:48	A
38418	HD124897	"	"	"	IIaO *	13/.5		20:52	20:54	C
38419	HD101501	11 35.8	34°46	"	"	"		21:00	21:40	A
38420	HD 96833	11 04.1	45°03'	"	"	"		21:46	21:59	B
38421	HD 135772 (HD 135 772 (2nd Pl)	15 11.5	33 41	"	"	"		22:05	22:12	C
38422	HD 137759	15 22.7	+59 19	"	"	"	71°F	22:15	22:2*	A
38422T	Colstep wedge		90sec		"					
38423	HD146573	15 39.4	6°44	"	"	"	71°F	22:29	22:35	B
38424	HD146791	16 13.0	−4°27	"	"	"		22:39	22:47	C
38425	HD153210	16 53.9	+9 32	"	"	"		22:53	23:04	A
38426	HD157999	17 21.5	4°14'	"	"	"		23:07	00:04	B
38427	HD161096	17 38.5	4°37'	"	"	"		00:09	00:15	C
38428	HD163917	17 53.5	−9 46	"	"	"		00:19	00:30	A
38429	HD166723	18 16.1	−2 55	"	"	"		00:36	00:44	B

Dome Temp. 70° H-65% Transparency Conditions very Good

Focus 2 R

Dome Temp.

ding Time E.S.T.		Hour Angle End	Declination	Seeing	~~Pg.~~ B Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	2						3/3	no filter			
0:48	A	0h38W	+19°23'	1-2	1.24	K2	15-30	1r-Giant	20/30	Arcturus Thin!	1.23
0:54	C	0h43W	+19°23'	1-2	1.24	K2	45	1r-Giant	20/25	Arcturus	1.23
1:40	A	5h05W	34°25'	2"	6.07	G8	15-20-10	"	200/150	61 U.Ma broken 2pcs	0.72
1:59	B	5 55W	44° 43'	2-3	4.14	K1	15-15-15	"	200/250	ψ U Ma	1.13
2:12	C	2h W	33°28'	1"	4.44	G8	15-15-15	"	40/28	δ Boo	0.95
2:30	A	2h05W	59 06	2"	4.96	K2III	15-15-15	"	40/45	ι Dra	1.17
								17-25 Dew	9 min @ 67°F MWPR - July 17	3rd b.t.t. new dew	
2:35	B	1 56W	+16° 36'	1-2"	3.81	K2	23-15-7	"	40/55	α Ser	1.17
2:42	C	1 35W	-4 32	1-2	4.19	K0	15-15-15	"	40/40	ε Oph	0.96
2:04	A	1 11W	+9 28	2	4.35	K2III	15-15-15	"	40/55	K Oph	1.15
0:54	B	1 45W	+4 13	2	5.84	K2II	15-30	"	200/450	τ Oph	1.50
0:15	C	1 38W	+4 38	2	3.93	K2III	22-23	"	20/22	β Oph	1.16
1:30	A	" "	-9 42	2"	4.24	K0III	15-30	"	200/178	ν Oph	1.00
0:44	B	1h30W	-2 51	2	4.20	K0III	20-25	"	200/150	ξ Ser	0.94
										cont →	

317 #2

* Wavelength not baked
** Exposed only for 6 hrs

Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38430	HD164058	17 54.3	51° 30	G-12	IIaO*	13/1.5	69°	0:50	0:58	C
38431	HD 201091	21 02.4	38° 15'	G-12	"	"		1:05	2:06	A
38432	HD 200905	21 01.3	43 32	"	"	"		2:08	2:42	B
38432T	Cal step wedge		90 sec		"	26-32	1st bubble July 18 Mc22 9 min			68°F
38433	HD 218154	23 00.6	+24 07	G12	IaO**	9/1.5		2:47	3:45	C
38433T	Cal step wedge 74		90 sec 74		"					
38434	Moon	1h 43	14°56'		IIaO**	13/1.9			3:55	E
38435	"				"					B
38436	"				"		65°F			C
38437	"				IIaO**					C
38438					IIIaj**					E
38439					IIIaj**					B
38440					"			4:16	4:17	C
38441					"					F
38442T	Cal step wedge		120 secs		IIIaj**					

Dome Temp. ..... Transparency Conditions Excellent

Focus .....

Dome Temp. 60° 88% on July 9th at 50° "A plateholder seems too bright plates

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:58	C	2 07W	51° 33'	2	3.74	K5 III	22-22	Ir - Giant	20/55	χ Dra : 1.52	
3:06	A	0 05W	38° 41'	1-2	6 38	K5 V	15-15-15	Ir - Giant	200/350	broken 2 pcs 61 Cyg A 1.19	
3:42	C	0 43W	44 52	1"	5.41	K4 III	K-15-15	"	20/65	ξ Cyg 1.69	
			for 2nd batch of II 40*							33 - 44 5th batch July A 10 min MWP2 69°F	
3:45	C	0^h 14 E	24 36	2-3	7.01	A0	V5-15-15	Split-Lg	200/70		
										33 -41 5th batch July 17 10 min MWP2 68F	
3:55	A						45	Ir-Giant	20/11		
	B						2 secs no filter	"	20/16		
	C		14° 25'				2 secs	"	20/22		
	D						2 secs	"	20/30		
	E						8 secs	"	20/32		
	B						8 secs	"	20/47		
4:17	G						8 secs	"	20/60		
	H						8 secs	"	20/90		

319

Date 13/14 JULY 1974 SAT/SUN Observer B.M.-T. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38442	DR Vul	$20^H09^M.6$	$+26°27'$	G-12	IIa-OE	13/1.5	77°F	21:52	00:20	B
38442T	Cal step wedge		90sec		"			0		
38443	DR Vul	20 09.6	126 27	G12	"	13/1.5	75°	00:22	03:25	C
38444	HD213985	$-2^H25^M.5$	$+57°54'$	G-12	IIa-OE	13/1.5		03:29	03:46	B
38444F	Focus			"		13	73°F			L

Dome Temp. 78° H-72?0

Focus B-14

Dome Temp. 70° H-85

Transparency Conditions Hazy

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
'20 E	0040E	+26 44	1-2"	8.6-9.3	B8	15-15-15	Sp. B in-Bln	800/260	Exp not Jumps between	
						42-44	Dew 2nd batch	Lights mupe 65°F		
3.5 C	0221W	+26 44	2"	"	"	15-15-15	"	800/240		
3.46 E	0028W	+25 19	1½"	G3	B7	15-15-15	Sp. B in-Bln	800/65		
						3/3	no filter		set B-14	

327

* Evacuated only

Date 1974 July 14-15 Sun/mon **Observer** Ir-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38445	HD 201091	21 02.4	38 15	612	IIaO-E*	13/.5	78°	22:56	00'23	B
38446	HD 206859	21 39.8	16° 53'	"	"	"	77°	00:33	00:58	C
38447	HD 180809	19 12.9	37 57'	"	IIaO-E*	"	77°	01:05	01:40	B
38447T	Col stg wedge		90sec		"					
38448	HD 210745	22 07.4	+57 42	60	"	13/.5		01.46	02:15	C
38449	HD 180711	19 12.5	+67 29	"	"	"		02'20	02:31	B
38450	HD 222404	23 35.2	+77 04	"	"	"		02'37	02:47	C
38451	HD 186791	19 41.5	+10° 22	"	"	"	74	02:53	03:11	B
38452	HD 206778	21 39.3	+9 35	"	"	"	74	03:17	03:31	C
38453	HD 12929	02 01.5	+22 59	"	"	"		03:37	03:42	B
38454	HD 3712	00 34.8	+55 59	"	"	"		03:48	03:59	C

Clear by 22:30

322

Dome Temp. 77°F " 82%

Focus 14-6

Dome Temp. 70 " 85%

Transparency Conditions Hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
31 31 E	+38 39	2-3"	6.38	K5 V	15+5-15	Ir - Giant	200/350	61 Cyg A 2" off end	B-V = 1.19	
01 31 E	17°18'	2-3	5.54	G5 I	15-15+5	"	200/230	9 Peg (also binary same way)	1.19	
31 38W	38°08'	2-3	5.61	K0 II	15-15-15	"	200/280	θ Lyr	1.25	
						45-54 Dew	July 17	P2 .0 mi @ 68°F old route 4th better		
00 43E	+58 06	1-2'	4.96	K1.5 Ib	15-15-15	"	20/55	ζ Cep	1.60	
02 30W	+67 39	2-3'	4.07	G9 III	15-15-15	"	20/33	5 Dra	1.00	
01 37E	+77 29	"	4.35	K1 IV	15-30	"	40/35	γ Cep	1.03	
02 38W	+10° 37'	2-3	4.24	K3 II	15-15-15	"	40/95	8 Aql	1.52	
01 00 W	+9° 49'	"	3.98	K2 Ib	15-15+5	"	40/100	ε Peg	1.56	
03 12E	+33 21	3	3.15	K2 [illegible]	15-15-15	"	40/45	α And	1.15	
01 32E	+56 26	3	3.47	K0 III	15-15-15	"	40/50	α Cas	1.18	

323

* Warmed but not baked

Date 1974 July 15-16 Mon-Tues **Observer** I.F.-T.D. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38455	HD 124897	14 11.1	19 42	G12	IIaO*	13/1.5	71°F	20:48	20:51	B
38456	HD 124897	14 11.1	19 42	"	"	13/1.5		21:02	21:13	C
38457	"	"	"	"	IIaj*	"	"	21:15	21:54	B
38458	"	"	"	"	IIaj*	13/1.5		22:12	22:17	C
38459	HD 95689	10 57.6	67°17	"	IIaO*	13/1.5		22:26	22:31	B
38460	"	"	"	"	"	"		22:38	22:43	C
38461	HD 180809	19h 12.9	37°57	"	IIaj*	13/1.35		23:14	03:04	B
38461 T1	Col stop wedge		180 sec		"					
38461 T2	Col stop wedge		90 sec		IIaO*					
38462	HD 12997	02 01.5	+02 59	60	IIaj*	13/1.5		03:10	03:50	C
38462 F	Focus			"		"	63°			F

Dome Temp. 60° H=72%

Focus 0

Dome Temp. 57° H=77%

Transparency Conditions Very Good - Clear from last night

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
1h 53 W	19° 23'	3	1.29	K2 III p	45	Ir - Grant	20/25	α Boo	1.29	
2h 15 W	"	2	3.0	"	15-15-15	"	20/25	Neutral Filter Δm = 1.75		
2 55 W	"	3-4	3.0	"	2-3-3	"	20/100	Δm = 1.75		
						"	20/80			
6h 45 W	61° 53'	3-4	2.85	K0 III	15-15-15	"	20/18	α UMa	broken 2 pairs reversed 1.06	
6h 57 W	"	"	"	"	23-22	"	20/18	α UMa		
3 04 W	38° 07'	3	5.61	K0 II	3-3-3	"	200/1300	θ Lyr	1.25	
						55-62	Dew Light	1st batch 9 min @ 68°F mw92		
3 00 E	26° 35'	2-3	3.15	K2 [illegible]	2-2-3	"	20/130	α Ari	1.15	

325

* evacuated only

Date 1974 July 16-17 Tues-Wed **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38463	HD 152224	16 47.0	+32 44	G12	IIaO *	13/.5	69°F	20:48	21:26	B
38464	AG 10133	19 31.0	+28 52	"	"	13/.3		21:32	00:43	C
38464T	Col step wedge		90sec		"					
38465	HD 218381	22 02.5	+20 03	"	"	13/.3		00:48	01:35	B
38466	HD 221377	23 26.6	+51 52	"	"	"		01:41	03:11	C
38467	HD 215289	23 59.9	+60 45	"	"	"	63°	03:14	03:31	B

Dome Temp. 62°F @ 56%

Transparency Conditions Very good

Focus 0

Dome Temp. 23:20 slows, bright Sat Air Cgy

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
26		00 04E	+32 39	1-3"	6.26	KO III	17 13-15	Sp Bin - Hd	200/100		
43		00 30 W	+29 05	"	9.55	F7 V	15-10-15	SSV	800/195	some + - cloud	
								Dev July 18	2 ne bad	68°F MWPZ 10 mi	
36		00 10E	+20 31	"	7.74	KO III	15-15-15	Vis Bin - Hd	800/260	cloud	
11		00 58E	+52 18	"	7.75	F4 III	15-15-15	"	800/210	"	
31		01 11 E	+61 11	"	5.9	K7 III	15-15-15	Sp Bin - Hd	200/175		

327

* evacuated only
** Baked July 16

Date July 18/19, 1974 Thurs-Fri. **Observer** Hu-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38468	HD 186547	19 39.9	+13 04	G12	IIaO *	13/.5	75°F	01 : 23	01:56	B
38469	HD 223582	23 45.6	+53 39	"	"	13/.3		02: 05	02: 58	C
38469.71	cal step wedge for plates 38468-69-70				IIaO *	90 sec.				
38470	HD 3531	00 33.2	+46 25	G12	IIaOB **	13/.3	73°F	03:02	03: 50	B

Dome Temp. 60°F 87%

Focus 153

Dome Temp. 60°F 86%

Transparency Conditions hazy

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:56		01 42 W	+13° 20′	3″	6.1	[illegible]	15-15-15	Sp Bin-Hd	200/75		
58		23 [illegible]	+54° 06′	2-3″	7.64	F2V	15-15-15	Vis Bin-Hd	800/225	at 100× 7 stars visible in visitors eyepiece, fld drawn.	
3.50		2[illegible]9 E	+46° 53′		7.62	K0III	15-5-15	Vis Bin-Hd	800/250		

329

Date July 19-20 Fri-Sat **Observer** Ri - Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38471	HD 14433	15 44.1	+13 01		IIIa-D	9/.5	74°F	20:50	21:45	B
38472	"	"	"	"	"	"		21:47	23:03	C
38473	"	"	"	"	"	"		23:04	00:29	B
38474	"	"	"	"	"	"		00:30	02:16	C
3847471	cal step wedge				IIIa-D	90 sec				
38475	HD 213307	22 25.3	+57 54	"	"	13/.5		02:30	03:00	C
38476	HD 14433	01 04.4	+27 48	"	"	9/.2	62°F	03:09	03:42	C

Dome Temp. 37°F 62%

Focus 5B

Dome Temp. 43°F 71%

Transparency Conditions Clear

Coding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	3	01 29 W	+12°46'	4-5	6.80	A0	15-15-15	Sp Bi [illegible]	400/120	opened door a few seconds with plate uncapped	
		02 51 W			"	"	15-15-15	"	400/120		
		04 09 W		4-5	"	"	15-15-15		400/120	(marked #3 on plate)	
		06 00 W		6	"	"	15-15-15	"	400/#3	western limit underdeveloped plate	
						Dwé	2 bckd 71-78	MWP2	69°F 10 min		
		00°05W	+58°14'	3-4		B7	15-15-15		400/120		
		[illegible] 15 W	+30°05'		5.6	A7	15-15		200/#9	exposed Box #1	

331

Visitors - Hs Hrs BHt - M3, M13, M57.
Till 22:30 EST.

Date July 20-21 **Observer** Kait - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38477	HD 171955	18 32.4	-06° 53	Q-12	IIIa-O B	20/3	65°F	22:42	01:33	13
38478	HH 328-116	19 55.0	+39° 41	Q-12	II-O B	13/4	60°F	02:00	03:45	2
38478T1	cal step wedge				II-O B	90sec				

Dome Temp. 50°F 69%

Transparency Conditions excellent

Focus 05R

Dome Temp. 48°F 80%

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
33	8	02h28m	−06°45′	3	9.3	KO	15-15-15	Waterloo	800/290		
45	8	03h36m	+39°49		7-10.	Em	15-15-	Em objects	800/35	Upper Box #3	
		↑	Dew	71-78	July 23	2nd batch		MWD2	10 min	@ 63°F	
		Error found 12 min									

333

-E evacuated, but not baked

-B evacuated & baked

Date Sun Mon - July 21-22 1924 **Observer** IB-RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38479	HD 124897	14 11.1	19 42	G12	IIIa J-E	13/.5	70°F	20:16	20:49	B
38480	HD 124897	"	"	G12	IIa O-B	13/.5		20:52	20:59	C
38481	HD 101501	11 35.8	34 46	G12	IIa O-B	13/.35		21:00	21:23	B
38482	HD 157999	17h21.m5	+04° 14°	G-12	IIIa J-E	13/.35		21.30	00:35	C
38482T	cal step wedge				IIIa J-E	180 sec				
38482T2	cal step wedge				IIa O-B	90 sec				
38483	HD 180809	19h 12.9	+37°57	G-12	IIIa J-E	13/.35		00:38	02:03	B
38484	HD 200905	21 01.3	43° 32'	G12	"	13/.35		02:10	03:22	C
38485	HD 12929	2h 04.5	22° 59'	"	"	13/.35	65	03:28	03 39	B
38486	HD 3712	0h 34.8	+55° 59'	"	"	13/.35	65	03:45	03h 55	C
38487	HD 12533	1h 57.7	41° 51	"	IIa O-B	13/.5		04:00	04h 03	B

Dome Temp. 52°F 62%

Focus 0

Dome Temp. 50°F 67%

Transparency Conditions excellent - clear

III aJ on right side of exposed Bγ 2

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	~~Prg.~~ B Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	B-V	Quality
0'49		2h 15 W	19° 24	3	1.29	K2III	3-3-3	I_2 - Giant	20/80	arcturum	1.23	
20'54		2h 20	19° 24	3	1.29	K2	15-15-15	"	20/20	arcturum	1.23	
21 23		05"25 W	34° 26'	2-6	6.07	G8V	15-15-15	"	200/100	61 U. Ma	0.72	
0.35		09"50 W	40° 15'	3-2	5.84	K2II	3-3-3	"	20/1875	σ Opl good seeing after storm	1.50	
					79-87	Dew	MWP2 9 min @ 69°F			open rock Density 23 1st batch		
2.03		02"29 W	+38°09'	1-2	5.61	K0II	3-3-3	I_2 - Giant	200/1125	θ Lyr.	1.25	
03 22		02"00 W	43°55	2	5.41	K4.5	3-3-3	"	40/500	ξ Cyg	1.69	
03 34		02h 15 W E X	23°25'	3	3.15	K2III	3-3-3	"	20/90	α Ari	1.15	
03'55		31° 00 E	56°26'	2	3.42	K0IIIa	3-3-3	"	20/100	α Cas	1.18	
04'03		02 23 E	42°15'	3	3.31	K3IIb	15-30	"	20/28	χ' And A	1.21	
			Corrected									

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E: uncoated but not baked
B: coated + baked

Date 1974 July 23/24 Tues-Wed **Observer** Hu-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38488	HD 142926	15 52.1	+42 51	G12	IIIaJ-E	91.5	67°F	20:44	22:22	B
38489	HD 190658	20 00.9	+15 13	"	IIaO-B	13/.5		22:30	23:20	C
38489T1		CaD Step Wedge			IIaJ-E		180 sec			
38489T2		"	"		IIaO-B		90 sec			

Dome Temp. 53°F @ 81%

Transparency Conditions hazy

Focus 0

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
22 15 W	+42° 42'	1"	5.6	Be	3-3-3	Hd Sp Bin	200/350	4 Her (near mer.)	weak
20" 56 E	+15° 30'		6.34	M2III	15-30	"	400/90	clouds overdevelop plane	v. weak
	Dew 1st batch July 30			MW32	@ 68°F 9 min				

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Visitors - ch (One group)

Date July 27/28 Sat/Sun **Observer** H.S - Gm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38490	HD 20994 HD 20,433	21h 04.4m	+29° 48'	G12	IIaO hyp	9/.7	71°.5	22:50	23:35	A
38491	HD 213207 Capella	22 25.5	+37 57	"	"	13/.5		23:50	00:14	D
38492	+35 3955	20 03.2	+35 31	"	"	13/.3		00:47	01:17	C
38493	HD 219154	23 00.6	+24°07'	"	"	13/.5		01:27	02:25	B'
38494	HD 219688	23 12.7	-9° 44'	"	IIIaJ·E	9/.5	68°	02:33	03:48	C

Dome Temp. 5?°F 82%
Focus 5 B
Dome Temp. 53°F 75%

Transparency Conditions hazy – fog [illegible]
Very good after [illegible]

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]:35	[illegible]	1h 28m E	+29° 51m	3-4	5.6	A0	15-15-15	Blue Sp. Bin	200/100	Very confused start – Gn	Sl. [illegible]
[illegible]:14	[illegible]	2 10 E	+58° 14'	"	6.3	B7	15-15-15	"	200/60		Sl. [illegible]
[illegible]:17	1[illegible]	1 16 W	+35° 37'	"	7.31	B1	15-15-15	"	400/ ?	#4 on field – exposure meter not counting	[illegible]
[illegible]:25	[illegible]	0 36 E		"	7.01	A0	15-15-15	"	400/180	(meter all right)	guiding
[illegible]	[illegible]	0 36 W	–7° 16'	5+	4.24	B5 V	2-2-2	"	20/30	Hs remarks on differential refraction Gn removes filter only after 12 counts	weak
			94 Dev 1st batch July 30 9 min MWP2 @ 63 F°								
			90-93 Dev 2nd batch July 30 9 min MWP2 @ 64 °F								

plates in box [illegible] –
ignored [illegible] to [illegible]
[illegible] on left, [illegible] right

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Date July 29/30 Mon/Tues Observer Ir-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38495	HD124897	14h 11.1	19°42'	G12	IIaO B	13/.5	70°	20:40	20:41	A
38496	"	14h 11.1	19°42'	G12	IIIaJE	13/.5		20:44	20:49	B
38497	HD201091	21h 02.4	38°15'	G12	"	13/.35		21:00	22:46	C
38497T1	Cal exp	wedge			IaO B					
38497T2	Cal exp	wedge			IIIaJE					

Dome Temp. 68°F 97% RH!

Transparency Conditions hazy

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Focus

Dome Temp. 65°F 98%

ding Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS B-V	Quality
0:41	A	2 28 W	19° 21'	4?	1.29	K2III	22-23	I_1-Grant	20/20	Arcturus	Fair
0:49	B	2 47 W	"	4?	1.24	K2III	3-3-3	"	20/80	"	fine
1:0	C	2 07 E	38° 38'	2-3	6.38	K5 I	3-6	"	200/418	61 Cyg A B-V = 1.19 ← Slit adjusted +0.35 after 10 counts	Weak
			Dew July 30 1st batch				9 min	MWP2 @	68° =		

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* Evacuated & baked

Date July 31-Aug 1 /74 Wed-Thurs **Observer** Tn-Sb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38498	HD 172365	18 37.8	+5 12	G12	IIaO* B	13/.3	67°	20:41	21:18	A
38499	HD171749	18 32.5	+5 11	"	"	18/.3		21:24	00:22	B
38499 F	Col/stp wedge				"					
39500	HD 213307	22 25.5	+57 54	G12	"	13/.5		00:28	00:55	C
38501	HD 201433	21 04.4	+29 48	"	"	9/.5		01:00	01:39	A
38501 F	Focus Test			"		9	65° F			B
38502	β Peg	23 02.8 (1970)	+27 55	"	"	9/.9		01:48	02:02	C

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Dome Temp. 67°F H=73%

Focus 0

Dome Temp. 60° H=90%

Transparency Conditions Very Good – then increasing cloudiness MOON NEAR FULL

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:18	A	01 01E	+5 16	1-2	7.2	F9Ib	15-15-15	IC4756 db	400/130?	Cirrus mode	Fair
0:22	E	02 07W	+5 16	2+	9.98		B-B-13	"	800/250	MOON LITE?	fair
							Dew	Dry 1 minute 9 min	@68°F		
0155	C	01 12E	+5 8 17	1-2'	6.3	B7	15-15-15	Sp. Rim-Eb	200/70	Steep Cloud	fair
1:29		00 51W	+30 08	2	5.7	Ac	15-15-15	"	200/70	thick cloud	fair
							5/5	no filter		FINE	
2:02	C	0 40E	——	1-2'	2.5	M2	15-30	Eb Brite Star	40/61		Fair guiding

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Date Aug 4-5/74 Sun-Mon **Observer** Tn - Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38503	HD 137569	15 21.7	+15 03	G-12	IIa-0-F	13/4	71°	20:50	22:52	A
38504T	[illegible]				"					
38504	HD 201433	21 04.24	+29 48	"	"	9/7		22:58	23:37	B
38505	HD 190919	20 02.2	+35 23	"	"	13/5		23:51	00:50	C
38506	HD 190918	20 02.2	+35 31	"	"	"		00:55	01:54	B
38507	HD 215307	22 35.5	+37 54	"	"	"		01:59	02:30	C
38508	HD 218594	23 00.6	+24 07	"	"	"		02:35	03:40	A
38509	HD 13180	02 21.1	-12 44	"	"	"	61°	03:45	04:01	B
38510	Jupiter	23 12.7 74	-6 33 74					04:16	04:18	C
38510F	Focus			"	"	9/7	61°			F

Dome Temp. 55°F 66%

Transparency Conditions hazy, some clouds

Focus 5.8

Dome Temp. 58° 98% outside

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:52		4 02 W	+14 52	2-3	P.1	BSE	15-15-15	Sp Bin - Plan	800/220	cloud	SS wk
			Dew Hys	MW	P2	61	9 min	@ 65°F			
3:37		0 55 E	+30 08	2-3	5.6-5.79	A0	15-15-15	"	200/100		Fair
0 50		0 20 W	+35 39	2-3	7.33	B1	15-15-15	"	400/140		Fair
1:54		2 24 W	+35 47	"	7.60	WN 4.5	15-15-15	"	400/200		Fair
2:22		0 32 W	+5 E 18	"	6.3	L7	15-15-15	"	200/90		Fair
2:49		1 12 N	+24 36	"	7.01	A0	15-15-15	"	200/70		Fair
0:47		1 47 E	-12 20	3-4	4.83	B9	15-15-15	"	40/15		Fair
			Equatorial belt				23-23		20/15 H	looked at Jupiter & Cyg X 1	Fair
							3/13				

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Date Aug 5-6 Mon-Tues **Observer** Tn - Gm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38511	HD 148857	16h 25.9	+2 12	G12	IIIaJ-E	9/.5	67°	20 : 23	20 : 50	A
38512	HD 152614	16h 49.17	+10 20	"	"	"		20 : 56	21 : 45	E
38513	DR Vul	20 09.6	+26 27	"	IIaO-B	18/.5		21 : 52	23 : 45	C
38514	ν Hyl	19 31.33	-1 31	"	IIIaJ-E	18/.5		23 : 47	00 : 41	A
38514 T	Cal step wedge		90 sec	"	IIaO-B	"	"	"	"	
38515	DR Vul	20 09.6	+26 27	G12	IIaO-B	13/.4	63°	00 : 48	02 : 43	D
38515 T	Cal Hg wedge		180 sec	"	IIIaJ-E	"	"	"	"	
38516	HD 218154	23 06.6	+24 07	G12	IIaO-B	9/.5		02 : 48	03 : 36	C
38517	HD 219688	23 12.7	-9 44	"	"	"		03 : 40	03 : 48	A
38518	HD 1-130	02 21.1	-12 44	"	"	"		03 : 52	04 : 05	B
38519	Io	23 12.3	-6 36	"	IIaF	9/.4		04 : 14.5	04 : 28	C
38520	Red Spot	"	"	"	"	9/.7		4 : 31	04 : 35	B

Dome Temp. 54° F 73.5%

Focus 5-B

Dome Temp. 50° 73 %

Transparency Conditions clear - very good

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5 51	A	01 00W	+2 06	2-3	3.86	A1V	2-2-3	Sp Prin. Sec	40/120	m.c. Nor	fair
1 45	A	01 31W	+10 16	1-2"	4.38	B8V	3-3-3	"	40/120	"	fair
3 45	C	00 11W	+26 43	2-3"	8.4 = 9.1	B8	15-15-15	"	800/260		sl. wk
0 41	A	01 45W	-1 15	"	4.36	B5III	3-3-3	"	40/100	m.c. Nor	fair
					Dec Aug 7 2nd batch		MWP2	61 9min	@ 69°F		
2 43	A	23 10W	+26 44	"	8.4 - 9.1	B8	15-15-15	"	800/200		sl. wk.
					Dec Aug 7 1st batch		MWP2	61 9min	@ 68°F		
0 36	C	01 12W	+24 33	1-2"	7.01	A0	15-15-15	"	400/140		fair
0 48	A	01 12W	-9 13	2"	4.24	B3V	15-15-15	"	40/15	Hatch inside opened upon removal	fair
0 05		01 40E	-12 18	2-3	4.85	B9V	15-15-15	"	40/14		fair
	C	02 05W	-6 31	"	25		3-3-		20/6	WIII. III OI • IV E	weak
	C	02 04		"			3-3		20/48		fair

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* Evacuated only

Date 1934 Aug 6-7 Tues-Wed Observer Tn-Hu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38521	HD 142926	15 52.1	+42 51	G12	IIaO*	13/.7	71°	20:27	20:40	A
38522	HD 186547	19 39.9	+13 04	"	"	13/.6		20:47	21:17	B
38523	HD 190658	20 00.9	+15 13	"	"	"		21:21	22:31	C
38523T	Cal step wedge		90sec	"	"					
38524	HD 214946	22 36.7	+44 29	"	"	"		22:37	23:16	A
38525	HD 216494	22 48.2	-12 09	"	"	"		23:25	00:00	B
38526	HD 225093	23 58.3	+72 36	"	"	"		00:12	01:12	C
38527	HD 7864	01 13.2	+39 25	"	"	13/.3		01:29	02:48	A
38528	HD 9546	01 28.6	+62 34	"	"	"		02:52	03:22	B
38529	HD 11188	01 44.9	+46 58	"	"	13/.5	66°	03:26	04:02	C
		1.5: looked at		30 Cyg - sound very bright to unaided eye						
		relative to		31 Cyg - must be a little at middle eyes!						
									Hu	

Dome Temp. 69° H: 69%

Focus 5-E

Dome Temp. 63° H: 88%

Transparency Conditions Fair - some haze

3155 Equipment varying objs - switch to 10" Ergo Cass - Hyadius

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 40	01 28W	+42 41	1-2"	5.6	Be	15-15-15	Sp Bin-Hd	200/105	4 Her	Fair
1 17	01 43E	+13 19	"	6.1	B8 III	15-15-15	"	200/75		Fair
2 31	03 51E	+15 29	2"	6.34	M2 III	15-15-15	"	400/310		Fair sl weak
							Dec Aug 7	9 min @ 68°F MWP2b1	2nd best.	
3 10	2 40E	+44° 55'	2"	7.12	A2	15-15-15	"	400/150		Fair weak
00 00	2 08E	-11° 40'	3"-4"	5.9	B9 V	15-15-15	"	200/75	haze	Fair
01 12	2 06E	+73 03	1-2"	7.52	A2	15-15-15	"	400/150		Fair
2 49	1 46E	+39 52	1-3"	8.26	K0 III	15-15-15	Vis Bin-Hd	400/135	haze	weak
3 55	1 29E	+62 56	1"	7.79	K0 III	15-15-15	"	400/110		weak guiding
4 32	0 41E	+47° 20'	1-3'	7.14	B8	15-15-15	Var Bin-Hd	400/150		Fair

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Date 74 Aug 7-8 Wed-Thur Observer Ri-Gn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38530	HD 152614 (Oph)	16 49 17	+10 20	G-12	IIIa-J-E	9/.5	74°F	20 : 17	20 : 45	A
38531	HD 190918	20h 02.2	+35° 31	G-12	IIIa O-E	13/.5		20 : 50	21 : 22	B
38532	DI2 VUL	20h 09.6	+26° 27'	G-12	IIIa O-E	13/.5		21 : 35	23 : 19	C
38533	HD 235679	21h 55.0	+54° 01	G-12	IIIa O-E	13/.3		23 : 41	01 : 49	A
38533T	cal step wedge		90 sec		"					
38534	HD 209819 (Agr)	22h 01.1	-14° 21'	G-12	IIIa J-E	13/.5		01 : 55	02 : 34	B
38535	HD 201433	21h 04.4	+29° 45'	G-12	IIIa O-E	9/.5		02 : 40	03 : 00	F
38535T	cal step wedge		180 sec		IIIa J-E					
38536	HD 217312	22 54.8	+62° 32'	G-12	IIIa O-E	13/.5		03 : 09	04 : 01	D
38537	α And	00 06.8 (1970)	+28° 55' (1970)	G-12	IIIa J-E	9/.9	69°F	04 : 06	04 : 12	A

Dome Temp. 39°F 62%

Focus 05-3

Dome Temp. 54°F 77%

Transparency Conditions Clear & some haze

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Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:45	0h40m W	+10°16′	2	4.38	B8V	3-3-3	Sp Bin flm	40/120		fair
72	0h55m E	+35°46′	2	7.60	WN4.5 O9.5Ia	15-15-15	" "	40/200		fair
3 19	0h02m E	+26°44′	2	8.6 9.3	B8	15-15-15	" "	80/260	BROKEN 3 PIECES	fair
1:49	0 37 W	+54°24′	3-4	9.21	B3Ia	15-15-15	" "	800/230		fair
		Dew lit behind Aug 12			MWP261		9 min @ 69°F		right side of exposed Box	fair
02 34	1m16 W	-13°55′		4.25	B8V	33-3	Sp Bin-Blu	40/120		fair
37 00	2m40 W	+30°10′	3-4	5.6-5.79	A0	15-15-15	" "	20/170		fair
									right side of exposed Box broken 1/2" off end	
04 01	0h52m W	+62°58′		7.7	B0V	15-15-15	Sp Bin-Hd	400/140		fair
04 12	0h53m W	+29°00′		2.06	B9p	5-5	Br Star	40/170		fair guide

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Date Fri. Sat Aug 9-10 1974 **Observer** Freedman - Li **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38538	HD 193299	$14^H\ 01.^M7$	$+64°\ 51'$	G-16	IIa-F	9/1.5	71°F	20.30	21:00	A
38539	HD 176318	$18^H\ 54^M.6$	$+38°\ 07$	G-16	IIa-F	13/1.5		21:19	23:03	B
38540	HD 194495	$20^H\ 20.8$	$+21°\ 10'$	G-16	IIa-F	13/1.5	64°F	23:06	04:02	C
38540T1	cal step wedge				IIa-F	5 min				

Dome Temp. 55°F 81%

Transparency Conditions excellent

Focus 0.5 B

Dome Temp. 50°F 72%

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1'00	03h50m W	+64° 30'	3	V= 3.66	A	No Filter 3-3-3	Friedman	40/80	telescope reversed	Lucas
3:03	2,40 W	+38° 15'		5.7	B8	3-3-3	"	200/430	" "	sl. wk
04102	24 35 W	+21° 26'		7.09	B7	3-3-3	"	400/870		sl. wk
						Dew	7 min 2nd batch	Aug 12 MWP2-b1	@ 69°F	

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* Exposed only

Date 1974 Aug 10-11 Sat-Sun Observer Jn. Kick Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
38541	M11 328-116	19 55.0	39 41	G12	IIaO-*	13/4	68°	21:38	00:18	A	
38541T	Col. Hydrogen		90sec		"						

Dome Temp. 64° H-99 b 1 r Transparency Conditions Good but hazy

Focus .....

Dome Temp. 64° H-98 b 1

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9:19	01 20W	+39 46	2"	=10	Em	15-19-15	Em prog	800/33	Tr wet	Fair
							Dew 1st batch	Aug 12	MW 2h1 9min @68°F	

355 Hd Index at HR 6773 at 20:50

Date 1974 Aug 13/14 Tues-Wed **Observer** Hu-Ri **Julian Day** 2442273.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38542	HD 152224	16 47.0	+32 44	G12	IIaO-E	13/1.5	75°F	20:10	20:47	A
38543	DR Vul	20 09.6	+26 27	"	"	24/1.5		21:15	23:36	B
38544	HD 217312	22 54.8	+62 32	"	"	13/1.5		23:44	01:38	C
38544UV	cal at prism edge				IIaO E	90 sec				
38545	HD 11926	01 52.0	+40 54	G12	"	13/1.3		01:44	03:05	A
38546	HD 11049	01 43.4	+07 12	"	"	"	65°F	03:20	04:27	B

Dome Temp. 60°F @ 70%

Focus 10-13

Dome Temp. 50°F 80%

Transparency Conditions excellent, occasional light cirrus haze low in South.

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 47		01 07W	+32° 38'	3"	6.26	K0III	16-16-16	Sp Bin-Hd	400/200		fair
3 30		00 35W	+26° 44'	3-4	8.6-9.3	B8	16-16-16	Sp Bin-Bln	800/260		fair
32		00 39E	+62° 57'	4"	7.7	B0II	16-16-16	Sp Bin-Hd	400/200		fair
05		01 35E	+41° 19'	4.	8.22	G5V	16-16-16	Vis Bin-Hd	800/200		fair
27		00 08E	+07 36	3-4"	8.28	K1III	16-16-16	"	600/240		sl wk

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Date 1974 Aug 14-15 Wed/Thu **Observer** Gn - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38547	HD 152614 spectro HD 152224 Oph	16h 49m 17s	+10° 20'	G-12	IIIaJ E	9/.5	68°F	20:04	20:43	A
38548	DR Vul	20 09.6	+26 27	"	IIaO-E*	13/.4		20:51	00:05	L
38547T	cal step wedge				IIIaJ-E			180 sec		
38549	HD 190918	20 [illegible]	+35 39	G12	IIaO E*	13/1.5		00:14	00:49	C
38550	HD 227654	20 02.9	+23 36	"	"	"		00:50	02:10	A
38551	HD 219312	22h 54.6m	+62° 32'	"	"	"	61°	02:14	03:03	L
38552	HD 12303	01 55.6	+54 20	G16	IIaF	"		03:14	03:50	A
38551T	cal step wedge				IIaO-E*			80 sec		
38553	HD 218066	23 00.6	+24 07	G12	IIaO-E*	13/1.5		04:05	04:34	P
38553F1	Focus			G2	8-R	13	60°+			L

14°F 63% Outside

Dome Temp. 54°F 74.5% Transparency Conditions clear - Hazy some 358

Focus 4-B ~ 8-R

Dome Temp. 59° F 89% Out.

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:43	F	01 05W	+10 16	2-3"	4.38	B8V	no filter 3-3-3	Sp Bin Plan	40/120	at right of box	sl hazy
0:55	K	21 06W	+26 44	3-4"	8.4-9.1	B8	15-15-15	"	800/240		very wk
		Pec MWP2 b1	9 min	1st	baked	Aug 15		at right of box			
1:04	C	02 00W	+35 47	2-3"	7.60		15-15-15	"	400/200	*WN 4.5 +09.5 I a #6	sl stray
2:10	K	33 20W	+35 45	2-4"	7.93	EO-1	15-15-15	"	400/140	#7	smdr fun
3:02		21 20W	+62 58	"	7.7	B0IV	15-15-15	Sp Bin Plan	400/140		smdr & fun
3:50	K	20 55E	+54 23	2-3"	4.89	K8V	no filter 3-3-3	Sp Bin - Li	40/100	Exp test to 2s 5 *AT Ear right of box	Dev 7 min MWP2 end batch Aug 15
		Dec 9 min	MWP2 b1	1st	baked	Aug 15				*80 sec, not 90 sec	
4:34	K		+24 37	3"	7.01	A0	15-15-15	Sp Bin - Li	400/110	Focus Set to 8-R	fun
							5/5	no filter			

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*Evac Aug 7

**Evac Aug 15 (20hrs Evac only)

Date 1974 Aug 15-16 Thurs-Fri **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38554	HD152224	16 47.0	+32 44	G12	IIIaO *	13/1.5	69°F	20 08	20:40	A
38555	HD186547	19 39.9	+13 09	"	"	"		20 49	21:07	B
38556	HD190658	20 00.9	+15 13	"	"	"		21 10	22:02	C
38556T	Calib		90sec		"					
38557	HD 214946	22 36.7	+44 29	"	"	"		22 06	22:42	A
38558	HD217312	22 54.8	+62 32	"	"	"		22 46	00:05	B
38559	HD 225289	23 59.9	-60 45	"	"	"		00:16	00:32	C
38560	HD 225093	23 58.3	+72 36	"	"	"		00:36	01:29	A
38561	HD10260	01 35.3	+60 32	"	"	"		01:34	02:00	B
38562	HD 10516	01 37.4	+50 11	"	IIIaJ	"		02:04	02:15	C
38562T	Calib	18sec			"					
38563	HD11188	01 44.9	+46 58	"	IIIaO **	"		02:19	02:49	A
38564	HD22912	03 35.7	+71 18	"	"	13/1.3	65°	02:54	03:47	B
38564T	Calib	70sec			"					

Dome Temp. 69°F H=72%

Focus 0

Dome Temp. 65°F H=96% ε drips

Transparency Conditions Recorded to Part. cloud base

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 40	09W	+32 39	2"	6.26	KO III	16-16-16	Sp Bin-Hd	400/200		Fair
21 07	118E	+13 16	"	6.1	B8 IV	16-16-16	"	200/75		Fair
2202	044E	+15 29	"	6.34	M2 III	16-16-16	"	200/120		sl wk
3 42	240E	+44 55	1-2"	7.12	A2	16-16-16	"	400/140		Sl wk Fair
35	35E	+62 58	"	7.7	B0 IV	16-16-16	"	400/180	some cloud	Sl wk Fair
32	12E	+61 11	"	5.9	B7 III	16-16-16	"	200/75	clock out by 1 min after 30355	Fair
1	13E	+73 03	2"	7.52	A2	16-16-16	"	400/140		Fair
08 08	221E	+60 56	2-3"	5.58	B7 V	16-16-16	"	200/75		Fair
12 06	07E	+50 35	2"	3.95	B0 p	no filter 3-3-3	"	20/50	* Per ** AT for right of box	Fair
									Extinct/CIT	
5 40	41E	+47 19	2"	7.14	B8	16-16-16	"	400/140		Fair
03 45	58E	+71 35	1"	7.86	KO III	16-16-16	Vis Bin-Hd	400/165		

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* Ever Aug 15

visitors - one group
visitors eyepiece badly out of focus

Date 1974 Aug 17-18 Sat-Sun Observer Gn - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38565	DR Vul	20h 09.6	+26° 27'	G-12	IIaO *	13/.45	72°	21:12	23:57	A
38565T	cal step wedge				IIaO *			90 sec		
38566	DR Vul	"	"	"	"	18/.4		23:58	02'21	B
38567	HD 218154	23h 00.6	+24° 07'	"	"	19/.5		02:28	03:47	C
38568	HD 14951	02 19.3	+10 09'	"	"	"		03:53	04:11	A
38569	HD 15130	02 21.5	-12 44	"	"	"		04:15	04:29	B

Dome Temp. 58°F 81% inside

Focus 5B

Dome Temp. 60° 98% outside

Transparency Conditions hazy & cloud → good

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:57	1h 10W	+26° 44'	2-3"	8.4-9.1	B8	16-16-16	Sp Bin Pole	400/150	balance off for first half	ss wk
12 21	3h 30W	"	1-2"	"	"	15-15-15	"	400/150	cloud	fair
07 47	2h 10W	+24 32	2"	7.01	A0	16-16-16	"	400/150	shuttered (1pc removed)	fair
04 1	0 45E	+10 32	"	5.38	B6	16-16-16	"	40/14		fair
04 29	0 29E	-12 19	"	4.85	B9V	15-15-15	"	40/14		fair

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* Evac Aug 15

Date 1974 Aug 18-19 Sun-Mon Observer Gn - Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38570	HD 137569	15h 21m.7	+15° 03'	G-12	IIaO *	13/.5	72°	20:07	21:45	A
38571	DR Vul	20h 09m.6	+26° 27'	"	"	18/.4		21:49	22:54	B
38572	"	"	"	"	"	"		22:57	00:08	C
38573	HD 201433	21h 04m.4	+29° 48'	"	"	13/.5		00:11	00:24	A
38572T	Cal step wedge		90sec							
38574	HD 213307	22h 25.5	+57° 54'	"	"	"		00:47	01:16	A
38575	HD 209819 near V	22h 01.2	-14° 21'	"	IIIaJ	"		01:23	02:08	B
38575T	Cal step wedge		180sec		"					
38576	HD 219888	23 12.7	-9 44	"	"	9/.5		02:14	02:38	C

Dome Temp. 72°F 75% outside

Focus SB

Dome Temp. 65° 73%

Transparency Conditions clear → hazy
lightning in NE & NW

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:45	3 47W	+14 49	1"-3"	8.10	BS III	16-16-16	Sp Bin Blm	400/140		sl wk
2 54	0 11W	+26 42	1"	8.4-9.1	B8	16-16-16	"	800/241	broken in two unequal pieces	fair
0:08	1 23W	"	"	"	"	16-16-16	"	800/260		fair
0:24	0 45W	+30° 07'	"	5.6-5.79	A0	16-16-16	"	200/70	cloud	fair
				-						
1:16	0 18W	+58° 15'	3"-4"	6.3	B-7	16-16-16	"	200/70	cloudy	fair sinking
2:11	1 33W	-13 54	"	4.25	B8 V	3-3-3	"	40/130	no filter *) also right	fair
					Dw	Withheld	Ag 21 MWP 61	8 min @ 69°F		
2:1			"	4.24	B5 I	3	"	40/17	thin cloud	

Astronomical Observatory of Harvard College

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* Evac Aug 5

Date 1974 Aug 19-20 Mon-Tues **Observer** Gn - Tw **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
38576	HD 152614 Oph	16h 49m.17	+10° 20'	G-12	IIIa-J-E	9/.5	76°	20:04	20:39	A
38576 T	Cal step wedge		180sec		"					
38577	DR Vul	20 09.6	+26 27	G12	IIIa-J	K2 1.5		20:46	22:25	B
38578	"	"	"	"	"	"		22:25	23:56	C
38579	"	"	"	"	"	"		23:57	02:05	A
38579 T	Cal step	wedge	90sec		"					
38580	HD190918	20 02.2	+35 31	G12	"	13/.5		02:10	03:02	B
~~38581~~	HD 201433	21 04.24	+29° 48'	G12	"	9/.5		03:07		

Dome Temp. 76°F 70% outside

Focus 8 B

Dome Temp. 65° 90%

Transparency Conditions hazy but guide fine

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:39	01 19W	+10° 16'	1-2"	4.38	B8?	3-3-3	Sp Bin Blue	40/120	i Oph (not Bloody Turks! far right of box	fair
			Dew	1st batch		Avg 21	8 min	MWP2 b1	@68°F	"
2:25	00 15E	+26° 44	1"	8.6-9.3	B8	16-16-16	"	800/300		fair
3:56	01 15W	"	1-1½"	"	"	16-16-16	"	800/300		fair
2:05	03 26W	"	1-2"	"	"	16-16-16	"	800/300		fair sunset
							Dew 2 min	Avg 22	MWP2 c2 9 min @65°F	
03:02	04 32W	+35 48	2"	7.60	WN 1.5 09-10	16-16-16	"	400/165	too far west (Tel 4m mirror-16)	fair
				5.6-5.79	A0	16-	"	200/	completely fogged in	

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1.5 Vac = 4.9 19

Date 1974 Aug 21-22 **Observer** Tn - Gn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38581	HD 188209	19^h 49.0	+46° 46'	G-12	IIaO *	9/1.5	79°	20:00	20:23	A
38582	DR Vul	20 09.6	+26 27	"	"	18/1.5		20:26	22:54	B
38582 T	Calibration		90 sec		"					
38583	DR Vul	20 09.6	+26 27	"	"	"		22:54	01:47	C
38584	HD 201433	21 04.4	+29 48	"	"	9/1.5		01:51	02:39	A
38585	HD 14392	02 14.4	+19 42	"	"	"		02:43	03:27	B
38586	HD 12303	01 55.6	+54 00	"	"	"		03:31	03:55	C
38587	HD 12216	01 54.9	+71 56	"	"	"		03:59	04:10	A
38588	β Cas	00 03.8	+58 36	"	IIIa-J *	9/1.9		04:15	04:41	C
38588 T	Calibration		180 sec		"					
38588 F	Focal Test			G12	IIaO *	9	71°+			B

Dome Te
Focus
Dome Te
Hour Angl
End

Dome Temp. 79°F H=62%

Focus 15 B

Dome Temp. 72°F H=80%

Transparency Conditions hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 47E	+47 00	1-2'	5.60	095 III	15-15-15	Sp Bin Bkm	200/70		fair
00 25W	+26 42	"	x.6-9.3	B8	15-15-15	"	800/297		sl wk guiding
			Dew 1st batch Aug 22				MWP261	9 min @68°F	
03 18W	"	"	"	"	15-15-15	"	800/268	too slow	sl wk guiding
3 14W	+30 09	2-3'	5.6-5.79	A0	15-15-15	"	200/70	hazier	fair
01 10E	+50 03	1-2	5.44	A(p)	15-15-15	"	200/68	63 Aql and hazier	fair guiding
00 24E	+54 24	1"	4.89	B8 V	15-15-15	"	200/70		fair
00 10E	+72 19	"	4.[illegible]	A1 V	15-15-15	"	200/70		fair
02 15W	+59 02	"	2.26	F2 IV	3-3-3	Brt Star	40/200		fair
			Dew 1st batch Aug 22				MWP261	9 min @68°F	
	[illegible]				4/4	not for	15-[illegible]	set for 74°F	

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* Evac Aug 19

Date 1974 Aug 22/23 Thurs-Fri **Observer** Hu-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38589	HD 152224	16 47.0	+32 44	G12	IIaO*	131.5	77°	19:55	20:43	A
38590	HD 186547	19 39.9	+13 04	"	"	"		20:47	21:10	B
38591	HD 190658	20 00.9	+15 13	"	"	"		21:12	22:46	C
38592	HD 214946	22 36.7	+44 29	"	"	"		22:50	23:33	A
38592T	C.V. sky	- dye	90 sec		"					
38593	HD 217312	22 54.8	+62 32	"	"	"		23:38	01:01	B
38594	HD 225093	23 58.3	+72 36	"	"	"		01:08	02:51	C
38595	HD 225289	23 59.9	+60 45	"	"	"		02:54	03:17	A
~~38596~~	~~HD 10260~~	~~01 [illegible]~~	~~+60 32~~	"	"	"	72°	~~03:20~~		B

Dome Temp. 78°F H 62%

Focus 15-E

Dome Temp. .....

Transparency Conditions Fair some SW cloud

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Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:42	01 40W	+32 38	2"	6.26	K0III	16-16-16	Sp Bin-Hd	200/120		fair
1:10	00 47E	+13 18	1-2"	6.1	B8IV	16-16-16	"	200/70		fair
2:46	00 29W	+15 30	2"	6.34	M2III	16-16-16	"	200/170		sundry fair
3:13	01 21E	+44 55	3"	7.12	A2	16-16-16	"	400/140		fair
1:21	00 10E	+5? 58	1-3"	7.7	B0V	16-16-16	"	400/180		fair sundry
2:51	00 35W	+73 0?	2-3"	7.52	A2	16-16-16	"	400/140	too faint? f/d drawn.	fair sundry
3:17	00 59W			5.9	B7III	16-16-16	"	400/140		fair
	~~f/d=6~~			~~5.58~~	F7V	16-	"	~~400~~/	cloud!	

377 1 small visitor Tour

Date 1974 Aug 24-25 Sat-Sun **Observer** Gn - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38596	DR Vul	20h 39.6	+26° 27'	G-12	IIaO-E	20/.5	68°F	20:54	23:25	A
38597	HD 201433	21 09.4	+27 98	"	"	13/.5		23:30	23:43	B
38598	HD 2.19154	23 00.6	+24 07	"	"	"	64°F	23:46	01:20	C
38598T	Col step wedge		90sec		"					
	~~HD 201433~~									

Dome Tem
Focus
Dome Tem

Hour Angle End

Dome Temp. 64°F 82%

Transparency Conditions clear
cloud in South

Focus 0

Dome Temp. 68° H: 97%

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:25	01 07W	+26 ±1	3"	8.6-9.3	B8	14-15-15	Sp Cim Clus	800/300		SS wk
2:47	00 3W	+30 10	2-3"	5.6-5.79	A0	15-15-15	"	200/70		fair
1:20	00 10W	+21 34	"	7.01	A0	15-15-15	"	200/75	wet, wet, wet	fair Sunday

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Date 1974 Aug 25-26/Sun-Mon **Observer** Gn - Tw **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38599	HD 152614 (Oph	16h 49m.3	+10° 20'	G-12	IIaJ-E	9/.5	69°	19:46	20:23	C
38600	DR Vul	20h 09m.6	+26° 27'	"	IIaO-E	18/.5		20:30	22:34	A
38600T	cal step wedge				"			90 sec		
38601	HD 190918	20h 02m.2	+35° 31'	"	"	13/.5		22:37	23:17	B
38602	HD 201433	21h 04m.4	+29 48	"	"	9/.5		23:23	23:40	A
38602T	Cal step wedge		180 sec		IIaJ-E					
38603	HD 209819	22 01.0	−14 21	"	"	9/.5		23:44	00:53	B
38604	HD 218154	23h 00m.6	+24° 07'	"	IIaO-E	9/.5		00:58	02:06	C
38605	HD 14392	02h 14.4	+49° 42'	"	"	9/.5		02:11	02:23	A
38606	HD 14951	02h 19m.3	+10° 09'	"	"	"		02:26	02:43	C
38607	HD 15130	02h 21m.1	−12° 44'	"	"			02:48	03:02	A
38608	HD 218154	23h 00m.6	+24° 07	"	"	13/.5		03:07	04:15	B
38609	HD 213 4	03 21.8	+9 23	"	IIaJ-E	9/.7	62°	04:21	04:44	C

Dome Temp. 68°F 77%

Transparency Conditions Clear very good

Focus 0

Dome Temp. 60° H: 96%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 28W	——	3"-1"	4.38	B8V	3-3-3	Sp Bin Bm	40/120	at far right of box	fair
0 20W	+26 44	2"	8.6-9.3	B8	15-15-15	"	800/300	broken in 3- zpx removed at far left of box	spacing fair
1 11W	+35 46	2"	7.6	WN4.5 +09.5Ia	15-15-N	"	400/200		spacing fair
0 32W	+30 10	1-2"	5.6-5.79	A0	15-15-15	"	200/70		fair
0 45N			4.18	B8V	3-15	"	40/140	∠ Agr	fair
1 00W	+24 34	2-3	7.01	A0	15-16-15	"	400/140		fair
1 56E	+50 04	1-2"	5.44	Ap	15-15-15	"	200/70	63 And	fair
1 41E	+10 33	"	5.38	B6	15-15-15	"	200/70	24 Ari	fair
1 23E	-12 19	"	4.85	B1V	16-15-15	"	200/70	eclet	fair
3 11W	+24 34	1-3"	7.01	A0	15-15-15	"	400/140		fair
0 42E	+9 42		3.66	B8p	2-2-3	"	40/140		fair

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* Evacuated

Date 1974 Aug 27-28 Tues-Wed **Observer** Hu - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
38610	HD 190658	20 00.9	+15 13	G12	IIaO *	13/1.5	68°	20:02	21:32	A
38611	HD 216494	22 48.2	-12 09	"	"	"	66°	21:45	22:15	B
38612	HD 217312	22 54.8	+62 32	"	"	"		22:26	01:26	C
38612T	Cal step	wedge	90sec		"					
38613	HD 214946	22 36.7	+44 29	"	"	"		01:29	02:24	A
38614	HD 225093	23 58.3	+72 36	"	"	"	60°	02:28	03:58	B
	Located at Anderson's because					it seemed to have				
	a visual stellar companion				in his Eyepiece					
	small companion				etc It not noticed before, Tn					

Dome Temp. 64° H-70%

Transparency Conditions light cloud

Focus

Dome Temp. 56° H-76%

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:32	0 26E	45 30	2"	6.34	M2III	16-16-16	Sp Bin-Hd	1½hr	Exp meter out of com	
2:15	2 7 E	-11 39	2'4"	5.9	B9V	16-16-16	"	½ hr		
1:26	0 35W	+62 58	"	7.7	B0V	16-16-16	"	3 hr	Cloud for most of exposure	
		Dw 4th	B-W	Sp.	H	MW2	C2	9 min	@ 68° F	
2:24	1 50W	44 54	3+4"	7.12	A2	16-16-16	"	5 min		
2:59	2 02W	+73 03	2-3"	7.52	A2	16-16-16	"	90 min	+ cloud	

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Date..... Observer..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
3										
3										
3										
3										
3										
3										

Ending Time E.S.T.

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380

HANDBOUND
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NIVERSITY OF
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